



**SANYO**

**SANYO  
STEREO  
CASSETTE DECK  
RD 4545  
SERVICE MANUAL**



## SPECIFICATIONS

|                            |                               |
|----------------------------|-------------------------------|
| <b>Tape Speed:</b>         | 1-7/8 IPS. $\pm 1.0\%$        |
| <b>Fast Forward Time:</b>  | 90 ~ 110 sec. (c-60 cassette) |
| <b>Rewind Time:</b>        | 90 ~ 110 sec. (c-60 cassette) |
| <b>Wow &amp; Flutter:</b>  | 0.07% RMS. (LIMIT)            |
| <b>Terminal Impedance:</b> | MIC. 10K ohm                  |
|                            | LINE IN 100K ohm              |
|                            | DIN INPUT 2.2K ohm            |
|                            | LINE OUT 5.6K ohm             |
|                            | DIN OUT 80 ohm                |

|                               |  |
|-------------------------------|--|
| <b>Cross Talk:</b>            | Better than 60 dB (track to track)               |
|                               | Better than 30 dB (chl. to chl.)                 |
| <b>Signal to Noise Ratio:</b> | Better than 50 dB DOLBY NR IN. WTD (CCIR) or DIN |
| <b>Hum &amp; Noise:</b>       | Less than 3 mV                                   |
| <b>Frequency Response:</b>    | 30 ~ 14KHz R/P (CrO <sub>2</sub> )               |
| <b>Power-Consumption:</b>     | 22 W   |

## ADJUSTMENT

### PRIOR TO MECHANICAL ADJUSTMENT

The surfaces of the tape-contacting and revolving parts (pulleys and belts) should be kept clean. Wipe off grease and oil stains, using alcohol.

### ADJUSTING HEAD POSITIONS

Set the unit in the PLAY mode after putting into it the special jig for adjusting the head positions, or a jig similar to the one shown in the illustration.

- The distances from the reference holes to the heads should be as shown in the illustration:

|               |                         |
|---------------|-------------------------|
| To R/P head   | $3.35 \pm 0.2\text{mm}$ |
| To erase head | $3.5 \pm 0.2\text{mm}$  |

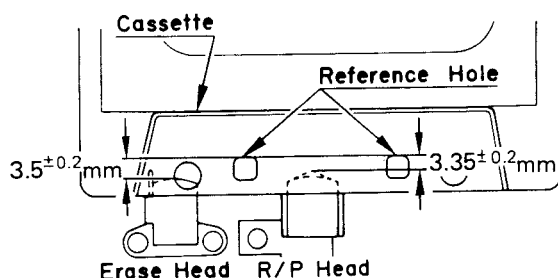


Fig. 1

- Loosen the screws fastening the bracket stopper. Then, move it until the R/P head comes to its proper position.

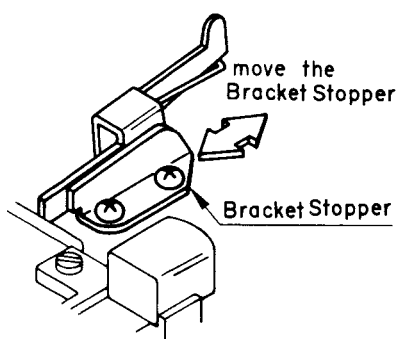


Fig. 2

- Loosen the screws fastening the erase head and adjust its position.
- After each adjustment, tighten the erase head screws and secure them by applying screw lock.

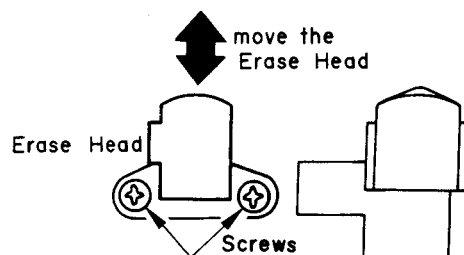


Fig. 3

### ADJUSTING SWITCH (S702, S708, S306) POSITIONS

- Push the PLAY button gradually and make sure that S702 and S708 are switched before S306.
- Each switch can be adjusted after loosening its screws.
- After adjusting each switch, tighten its screws and secure them by applying screw lock.

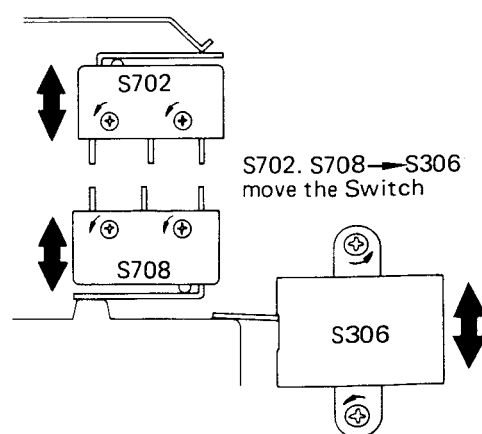


Fig. 4

### ADJUSTING SWITCH (S111) POSITION

- Push the RECORD button slowly and make sure that the RECORD/PLAY switch works before S111.
- Loosen the screws fastening the bracket switch and adjust its position as shown. After adjustment, there should be a clearance of more than 0.5mm between the switch (S111) actuator and the switch unit.

## ADJUSTMENT

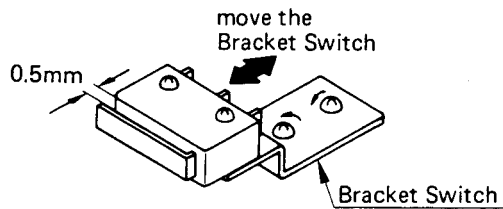


Fig. 5

- After each adjustment, tighten the bracket switch screws and apply screw lock to secure them.

### ADJUSTING SWITCH (S701, S705) POSITIONS

- S701 and S705 should be actuated on pushing the PAUSE and REWIND buttons respectively.
- Loosen the screws fastening each switch and adjust its position.

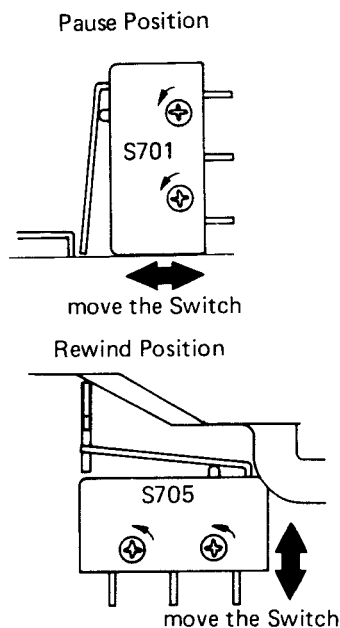


Fig. 6

- After adjustment, tighten the screws fastening the switches and apply screw lock.

### TAKE-UP TORQUE

- Measure the take-up torque during playback with a torque gauge. The proper value is 35 to 65 gr-cm.
- If the specified take-up torque is not obtained, replace the take-up reel assembly.

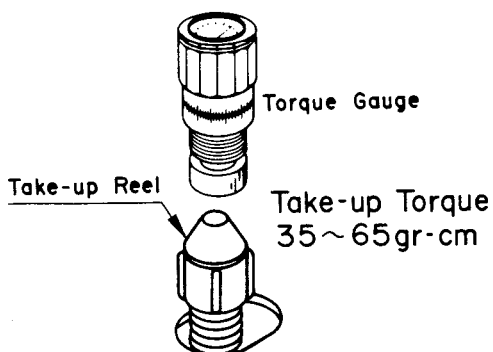


Fig. 7

### ADJUSTING FULL AUTO STOP SYSTEM

- With the unit in the recording mode, the FULL AUTO STOP system should shut off power on supplying DC 18V from the constant voltage regulator to the plunger through the circuit shown in the illustration.

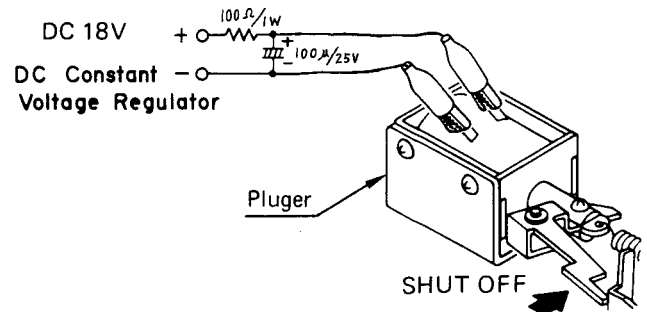


Fig. 8

- Make necessary adjustment by bending the plate of the SELECT button assembly.

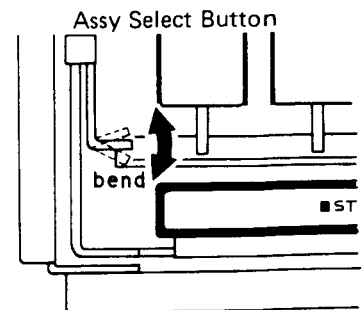


Fig. 9

### ADJUSTING REED SWITCH POSITION

- Adjust the magnet so that it becomes identical in height with the printed circuit board.

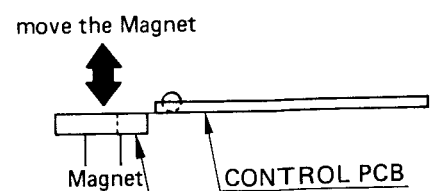


Fig. 10

- Loosen the screws fastening the printed circuit board and adjust its position until there is a clearance of 1.5 to 2.0mm between the reed switch and the magnet.

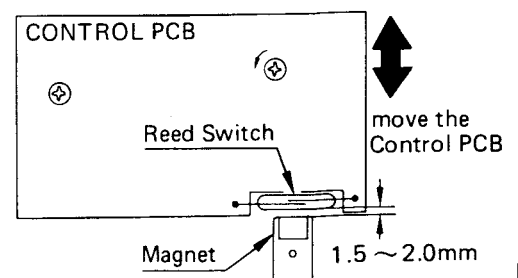


Fig. 11

## ADJUSTMENT

- After the above adjustment, fasten the PCB screws securely.

## ELECTRICAL ADJUSTMENT

### SWITCH SETTINGS FOR MAKING ADJUSTMENT

- Unless otherwise specified in the respective sections, set the switches to the following positions:
  - TAPE SELECT SWITCH ..... NORMAL
  - DOLBY NR SWITCH ..... OFF
  - LIMITER SWITCH ..... OFF
  - MONITOR SWITCH ..... SOURCE
  - DOLBY CALIBRATION SWITCH ..... OFF
- For electrical adjustment, use an audio signal generator with an output impedance of 600 ohms.

### ADJUSTING TAPE END APPROACHING ALARM TIME

- Turn the adjusting volume P401 counterclockwise until its resistance value becomes maximum.
- Play back C-60 cassette tape with a sufficient length of tape remaining to be played for more than five minutes and measure time from the sounding of the tape end alarm till the end of the tape.
- Adjust the volume P4018 in such a way that it will take two minutes from the sounding of the alarm till the end of the tape.

### ADJUSTING TAPE SPEED

- As shown, connect a frequency counter to either the left or the right LINE OUT.

Frequency Counter  
3kHz  $\pm$  3%

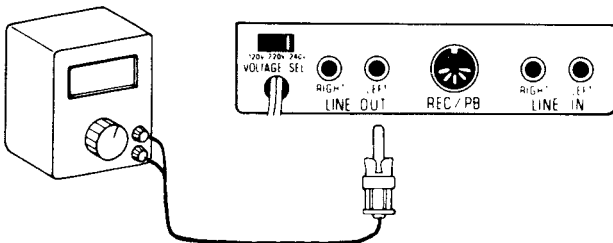


Fig. 12

- Play back 3 kHz test tape. Adjust the volume P501 until the frequency counter reading stands at 3 kHz  $\pm$  3%.

### ADJUSTING AZIMUTH OF R/P HEAD

- Connect a VTVM to LEFT LINE OUT and play 10 kHz test tape for azimuth adjustment.

V.T.V.M (Max.)

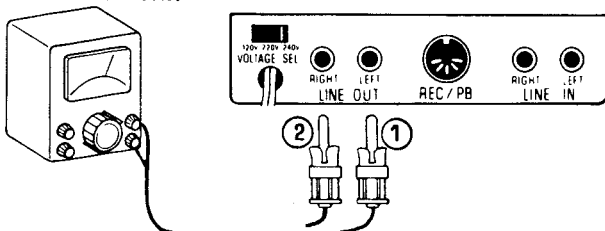


Fig. 13

- Turn the azimuth adjusting screw to the position where the VTVM needle swings to maximum. (No. 1 position)
- Disconnect the VTVM from LEFT LINE OUT and reconnect it to RIGHT LINE OUT. Turn the azimuth screw until the VTVM needle swings to maximum. (No. 2 position)

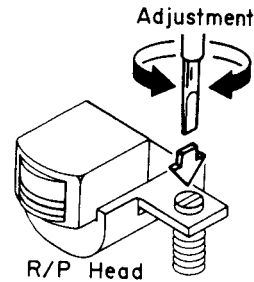


Fig. 14

- Turn the azimuth screw to the center of the Nos. 1 and 2 positions as illustrated. (No. 3 position)

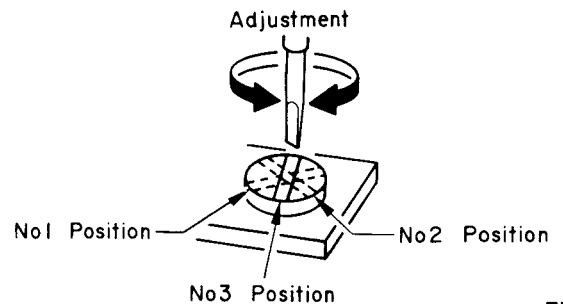


Fig. 15

- After the completion of azimuth adjustment, fix the azimuth screw securely by applying screw lock.

### ADJUSTING PLAYBACK FREQUENCY RESPONSE

- As shown in the illustration, connect a VTVM to LEFT LINE OUT and play back a test tape (TEAC MTT-117SP) for checking frequency response.

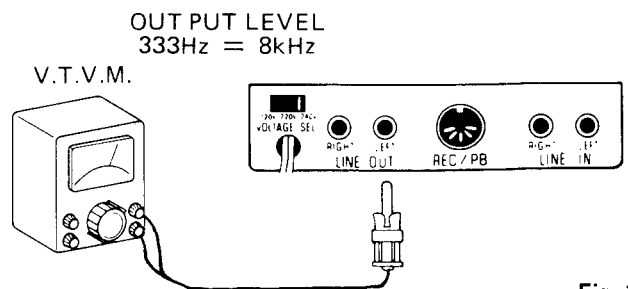


Fig. 16

- Adjust the volume P101 while watching the VTVM needle. The output difference between 333 Hz and 8 kHz signals recorded on the test tape should be less than  $\pm 1$ dB.
- Adjust the volume P201 for the right channel in a similar manner.

### ADJUSTING PLAYBACK GAIN

- Connect a VTVM to LEFT LINE OUT as shown and play back Dolby level adjusting tape (TEAC MTT-150).



## ADJUSTMENT

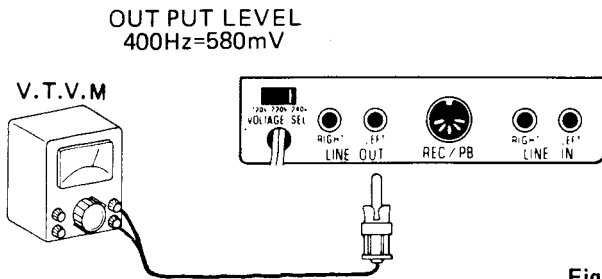


Fig. 17

- Adjust the output of the 400 Hz signal recorded on the tape to become 580 mV  $\pm 0.5$ dB by turning the volume P102 while reading the VTVM.
- Make similar adjustment for the right channel with the volume P202.

### ADJUSTING METER

- Connect an audio signal generator (output impedance = 600 ohms) to LEFT LINE IN and a VTVM to LEFT LINE OUT.

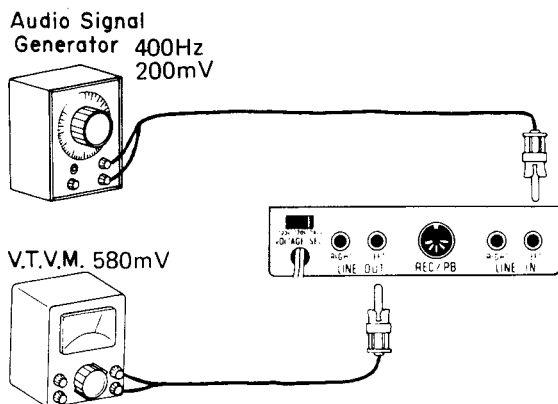


Fig. 18

- Set the audio signal generator output at 400 Hz 200 mV. Set the unit in the recording mode.
- Adjust INPUT VOLUME VR1 until the VTVM reading becomes 580 mV. Then, adjust the volume P103 so that the needle of the left channel meter stands at the middle of the Dolby zone mark.

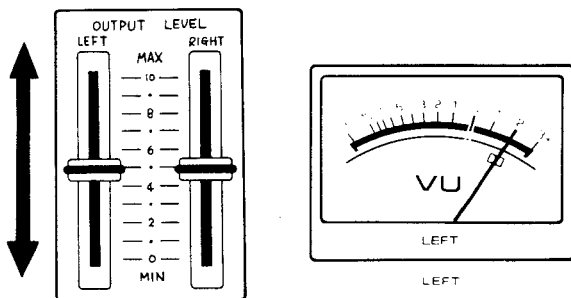


Fig. 19

- Make similar adjustment for the right channel with INPUT VOLUME VR2 and the volume P203.

### ADJUSTING RECORDING BIAS

- Turn CALIBRATION VOLs VR5 and VR6 to the center and set the TAPE SELECT switch to CHROME.

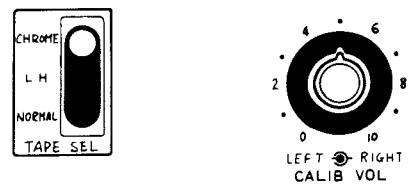


Fig. 20

- As shown in the illustration, connect an audio signal generator to LEFT LINE IN and a VTVM to LEFT LINE OUT. After this, mount a chrome tape cassette (BASF TP-18) onto the unit. The output of the audio signal generator should be 400 Hz 200 mV.

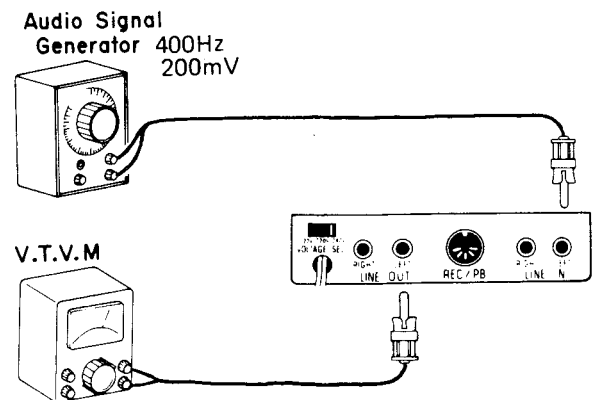


Fig. 21

- Adjust INPUT VOLUME VR1 in such a way that, when recording signals from the audio signal generator, the needle of the left channel meter swings to the center of the Dolby zone mark.

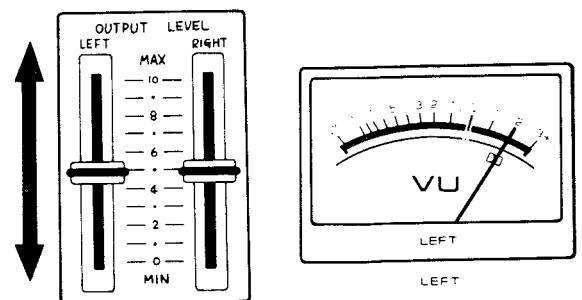


Fig. 22

- Set the MONITOR switch to TAPE. Increase bias current by turning the volume P303. Continue turning the volume until the VTVM reading becomes maximum, from which point it should be reduced by 2dB.

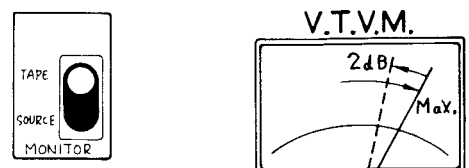


Fig. 23

## ADJUSTMENT

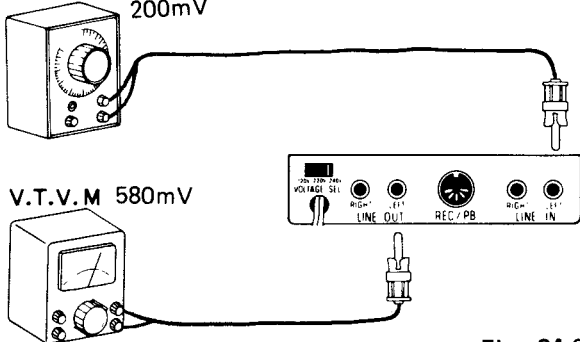
- Make similar adjustment with the right channel with INPUT VOLUME VR2 and the volume P304.

### ADJUSTING MONITOR GAIN

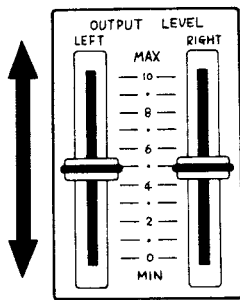
- As illustrated, connect an audio signal generator (output impedance = 600 ohms) to LEFT LINE IN and a VTVM to LEFT LINE OUT. Then, set a standard tape cassette into the unit.
- Set the output of the audio signal generator at 400 Hz 200 mV. Record its signal and adjust INPUT VOLUME VR1 until the VTVM reading becomes 580 mV.

#### Audio Signal

Generator 400Hz  
200mV



Figs. 24 & 25



- Reproduce the recorded signal and adjust CALIBRATION VOL. VR5 until the VTVM reading becomes 580 mV  $\pm 0.5$ dB.
- Set the MONITOR switch to TAPE.
- Record the signal from the audio signal generator again. Adjust the volume P105 until the needle of the left channel meter stands at the center of the Dolby zone mark.

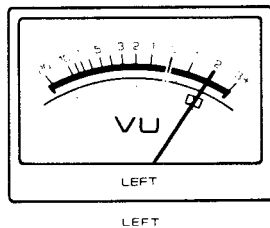
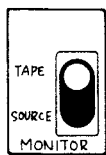


Fig. 26

- Make similar adjustment with the right channel with INPUT VOLUME VR2, CALIBRATION VOL. VR6 and the volume P205.

### ADJUSTING DOLBY CALIBRATION OSC (APPROX. 400 Hz) GAIN

- Connect a VTVM to LEFT LINE OUT as shown.
- Set to ON the Dolby calibration switch.
- Set the unit in the recording mode and adjust the volume P306 until the VTVM needle stands at 580 mV  $\pm 0.5$ dB.
- Make similar adjustment with the right channel with the volume P307.

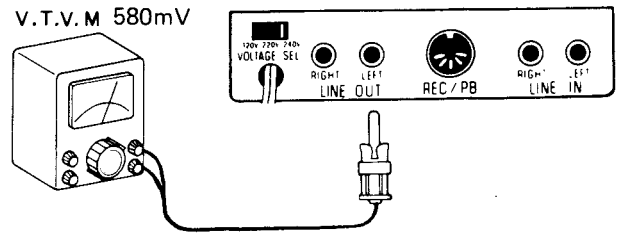


Fig. 27

### ADJUSTING RECORDING/PLAYBACK FREQUENCY RESPONSE

#### 1. NORMAL TAPE

- Set the TAPE SELECT switch to NORMAL and mount a normal tape cassette onto the unit.
- Connect an audio signal generator and an attenuator to LEFT LINE IN as illustrated.

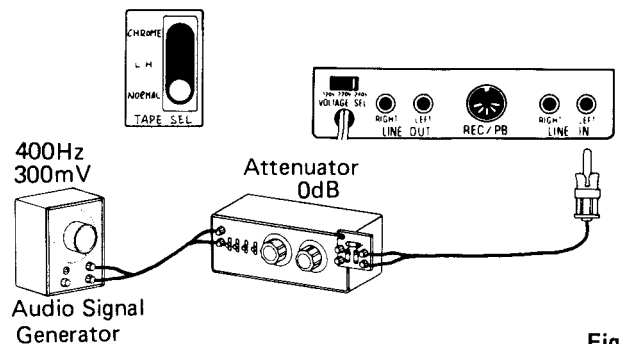


Fig. 28

- Set the audio signal generator output at 400 Hz 300 mV. With the unit in the recording mode, adjust INPUT VOLUME VR1 until the needle of the meter for the left channel comes to the center of the Dolby zone mark.

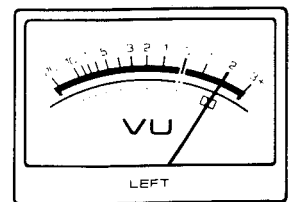
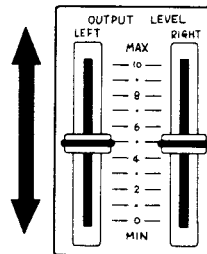


Fig. 29

- Set the MONITOR switch to TAPE and adjust CALIBRATION VOL. VR5 until the needle of the meter for the left channel points to the center of the Dolby zone mark.

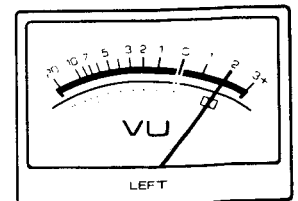
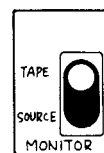


Fig. 30

## ADJUSTMENT

- Set the attenuator at 20dB and connect a VTVM to LEFT LINE OUT.
- Record from the audio signal generator 1 kHz and 10 kHz signals alternately. Play back the signals.
- Adjust the volume P106 while watching the VTVM needle. The output difference between 10 kHz and 1 kHz signals recorded should be  $0 \pm 1.5\text{dB}$  when they are played back.

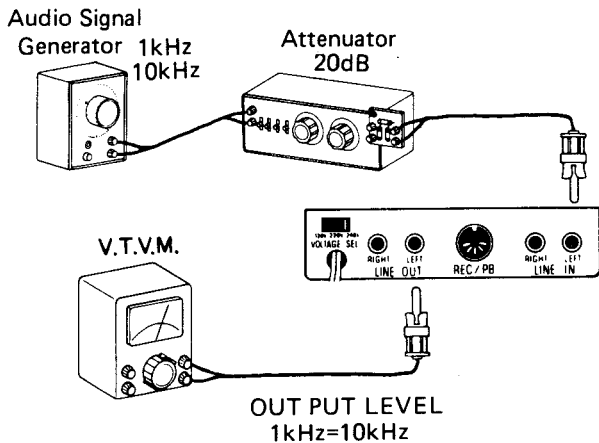


Fig. 31

- Make similar adjustment with the right channel with INPUT VOLUME VR2, CALIBRATION VOL. VR6 and the volume P206.

### 2. L.H. (LOW-NOISE HIGH-OUTPUT) TAPE

- The same procedure of adjustment applies to normal tape and L.H. tape, except for the following:
  - TAPE SELECT switch position – L.H.
  - Kind of tape used – Low-noise High-output tape (TDK-SD)
  - Frequency of input signal – 1.2 kHz and 12 kHz
  - Volumes to be adjusted – P107 (left channel), P207 (right channel)
  - Adjusted level – Output difference between 12 kHz and 1.2 kHz signals =  $0 \pm 1.5\text{dB}$ .

### 3. CHROMIUM DIOXIDE TAPE

- The same procedure of adjustment applies to normal tape and chromium dioxide tape, except for the following:
  - TAPE SELECT switch position – CHROME
  - Kind of tape used – Chromium dioxide tape (BAFS TP-18)
  - Frequency of input signal – 1.4 kHz and 14 kHz
  - Volumes to be adjusted – P108 (left channel), P208 (right channel)
  - Adjusted level – Output difference between 14 kHz and 1.4 kHz signals =  $0 \pm 1.5\text{dB}$

### ADJUSTING MONITOR HEAD AZIMUTH

- Connect an audio signal generator and an attenuator to LEFT LINE IN as illustrated. Then, mount a normal tape cassette onto the unit.
- Record 6 kHz signal from the audio signal generator and adjust the audio signal generator output until the needle of the meter for the left channel points to the center of the Dolby zone mark.

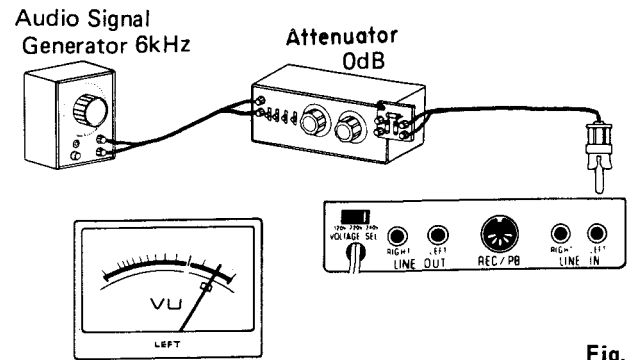


Fig. 32

- Set the attenuator at 20dB. Set the MONITOR switch to TAPE and connect a VTVM to LEFT LINE OUT.

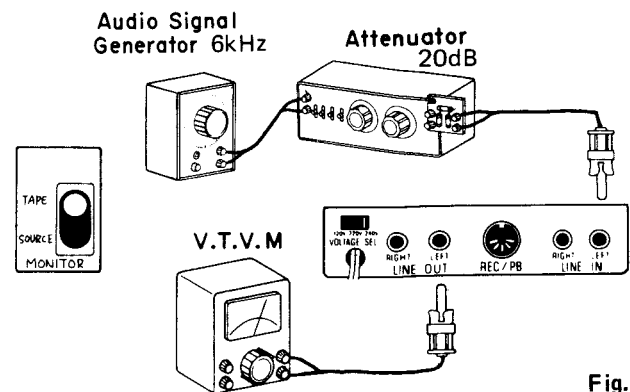
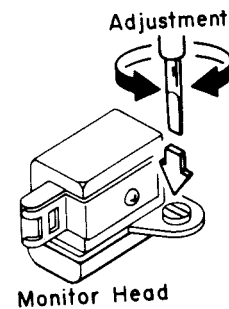
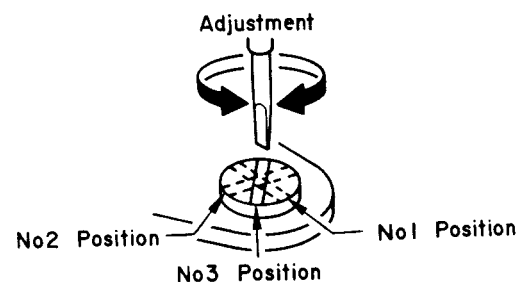


Fig. 33

- Set the monitor head azimuth adjusting screw to the No. 1 position halfway between the Nos. 1 and 2 positions as instructed in the section on "Adjusting azimuth of R/ head".



Figs. 34 & 35



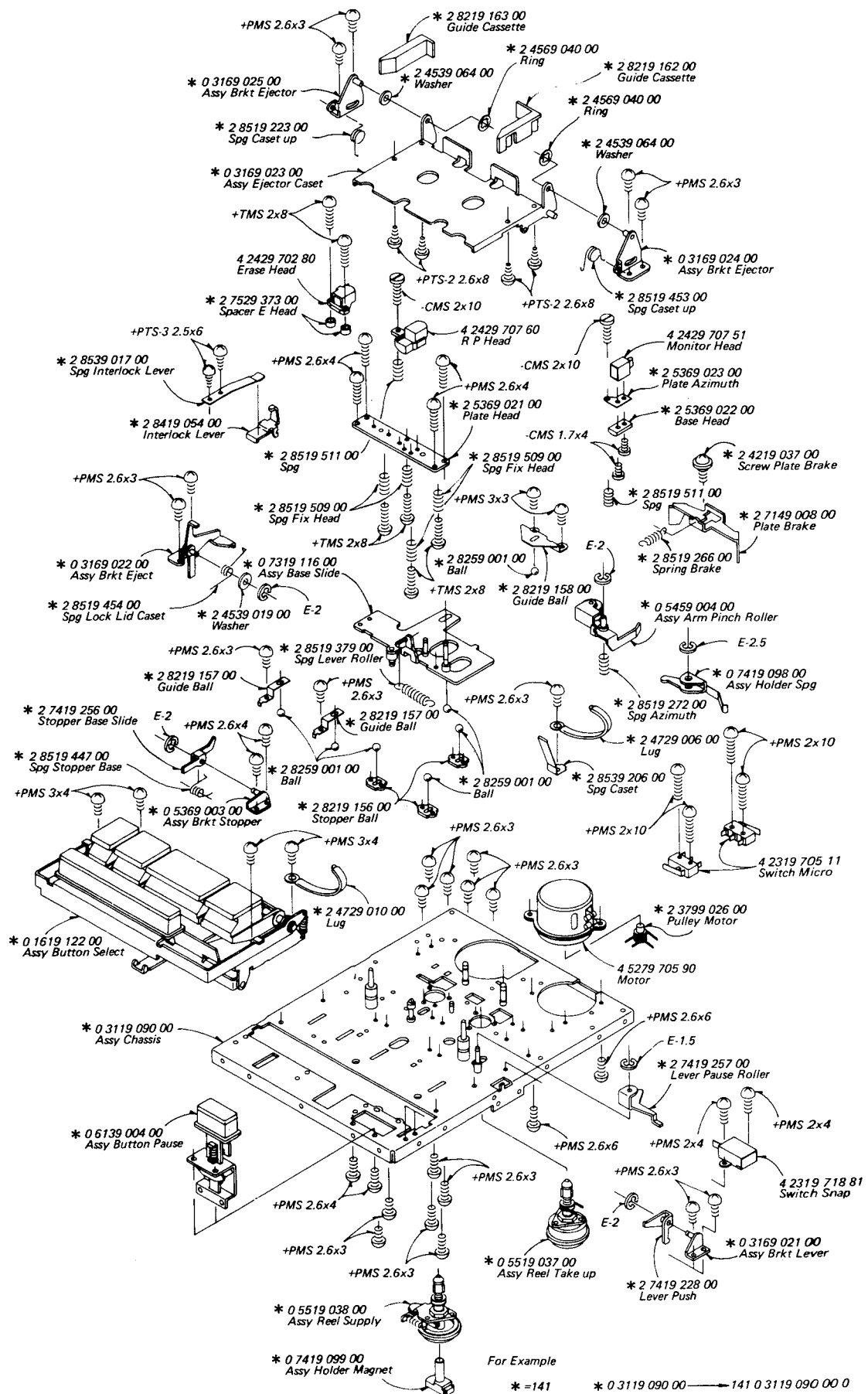
- After the completion of adjustment, fix the azimuth screw by applying screw lock.

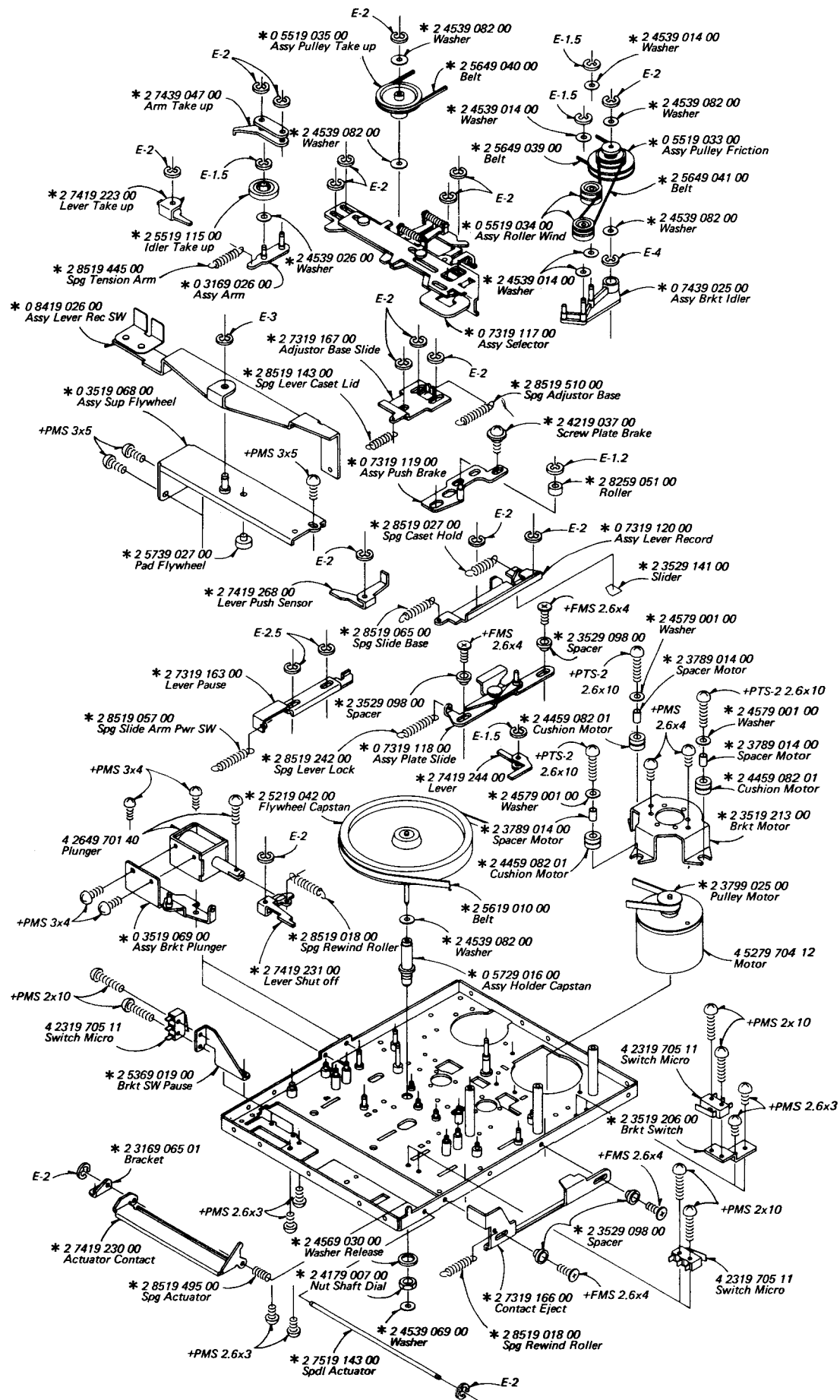
# PARTS LIST

| Key No.   | Part No.         | Description                    | Q'ty |
|-----------|------------------|--------------------------------|------|
| MECHANISM |                  |                                |      |
|           | 141 0 3119 09000 | Chassis Assy                   | 1    |
|           | 141 0 3169 02100 | Bracket Assy, Lever            | 1    |
|           | 141 0 3169 02200 | Bracket Assy, Eject            | 1    |
|           | 141 0 3169 02300 | Ejector Assy, Cassette         | 1    |
|           | 141 0 3169 02400 | Bracket Assy, Ejector          | 1    |
|           | 141 0 3169 02500 | Bracket Assy, Ejector          | 1    |
|           | 141 0 3169 02600 | Arm Assy                       | 1    |
|           | 141 0 3519 06800 | Support Assy, Flyheel          | 1    |
|           | 141 0 3519 06900 | Bracket Assy, Plunger          | 1    |
|           | 141 0 5369 00300 | Bracket Assy, Stopper          | 1    |
|           | 141 0 5459 00400 | Arm Assy Pinch Roll            | 1    |
|           | 141 0 5519 03300 | Pulley Assy, Friction          | 1    |
|           | 141 0 5519 03400 | Roller Assy, Wind              | 2    |
|           | 141 0 5519 03500 | Pulley Assy, Take Up           | 1    |
|           | 141 0 5519 03700 | Reel Assy, Take Up             | 1    |
|           | 141 0 5519 03800 | Reel Assy, Supply              | 1    |
|           | 141 0 5729 01600 | Holder Assy, Capstan           | 1    |
|           | 141 0 7319 11600 | Base Assy, Slide               | 1    |
|           | 141 0 7319 11700 | Selector Assy                  | 1    |
|           | 141 0 7319 11800 | Plate Assy, Slide              | 1    |
|           | 141 0 7319 11900 | Push Brake Assy                | 1    |
|           | 141 0 7319 12000 | Lever Assy, Record             | 1    |
|           | 141 0 7419 09800 | Holder Assy, Spring            | 1    |
|           | 141 0 7419 09900 | Holder Assy, Magnet            | 1    |
|           | 141 0 7439 02500 | Bracket Assy, Idler            | 1    |
|           | 141 0 8419 02600 | Lever Assy, Rec Switch         | 1    |
|           | 141 2 3169 06501 | Bracket                        | 1    |
|           | 141 2 3519 20600 | Bracket, Switch                | 1    |
|           | 141 2 3519 21300 | Bracket, Motor                 | 1    |
|           | 141 2 3529 09800 | Spacer                         | 2    |
|           | 141 2 3529 09800 | Spacer                         | 2    |
|           | 141 2 3529 14100 | Slider                         | 1    |
|           | 141 2 3789 01400 | Spacer, Motor                  | 3    |
|           | 141 2 3799 02500 | Pulley, Motor                  | 1    |
|           | 141 2 4179 00700 | Nut Shaft Dial                 | 1    |
|           | 141 2 4219 03700 | Screw, Plate Brake             | 1    |
|           | 141 2 4219 03700 | Screw, Plate Brake             | 1    |
|           | 141 2 4459 08201 | Cushion, Motor                 | 3    |
|           | 141 2 4539 01400 | Washer                         | 4    |
|           | 141 2 4539 01900 | Washer                         | 1    |
|           | 141 2 4539 02600 | Washer                         | 1    |
|           | 141 2 4539 06400 | Washer                         | 2    |
|           | 141 2 4539 06900 | Washer                         | 1    |
|           | 141 2 4539 08200 | Washer                         | 2    |
|           | 141 2 4539 08200 | Washer                         | 2    |
|           | 141 2 4539 08200 | Washer                         | 1    |
|           | 141 2 4569 03000 | Washer, Release                | 1    |
|           | 141 2 4569 04000 | Ring                           | 2    |
|           | 141 2 4579 00100 | Washer                         | 3    |
|           | 141 2 5219 04200 | Flywheel Capstan               | 1    |
|           | 141 2 5369 02100 | Plate, Head                    | 1    |
|           | 141 2 5369 02200 | Base, Head                     | 1    |
|           | 141 2 5369 02300 | Plate, Azimuth                 | 1    |
|           | 141 2 5519 11500 | Idler, Take up                 | 1    |
|           | 141 2 5739 02700 | Pad, Flywheel                  | 1    |
|           | 141 2 7149 00800 | Plate, Brake                   | 1    |
|           | 141 2 7319 16300 | Lever, Pause                   | 1    |
|           | 141 2 7319 16600 | Contact, Eject                 | 1    |
|           | 141 2 7319 16700 | Adjustor, Base Slide           | 1    |
|           | 141 2 7419 22300 | Lever, Take Up                 | 1    |
|           | 141 2 7419 22800 | Lever, Push                    | 1    |
|           | 141 2 7419 23000 | Actuator, Contact              | 1    |
|           | 141 2 7419 23100 | Lever, Shut Off                | 1    |
|           | 141 2 7419 24400 | Lever                          | 1    |
|           | 141 2 7419 25600 | Stopper, Base Slide            | 1    |
|           | 141 2 7419 25700 | Lever, Pause Roller            | 1    |
|           | 141 2 7419 26800 | Lever, Push Sensor             | 1    |
|           | 141 2 7439 04700 | Arm, Take Up                   | 1    |
|           | 141 2 7519 14300 | Spindle Actuator               | 1    |
|           | 141 2 7529 37300 | Spacer, E Head                 | 2    |
|           | 141 2 8219 16200 | Guide, Cassette                | 1    |
|           | 141 2 8219 16300 | Guide, Cassette                | 1    |
|           | 141 2 8259 05100 | Roller                         | 1    |
|           | 141 2 8519 01800 | Spring, Rewind Roller          | 1    |
|           | 141 2 8519 01800 | Spring, Rewind Roller          | 1    |
|           | 141 2 8519 02700 | Spring, Cassette Hold          | 1    |
|           | 141 2 8519 05700 | Spring, Slide Arm Power Switch | 1    |
|           | 141 2 8519 06500 | Spring Slide Base              | 1    |
|           | 141 2 8519 14300 | Spring, Lever Cassette Lid     | 1    |
|           | 141 2 8519 22300 | Spring, Cassette Up            | 1    |

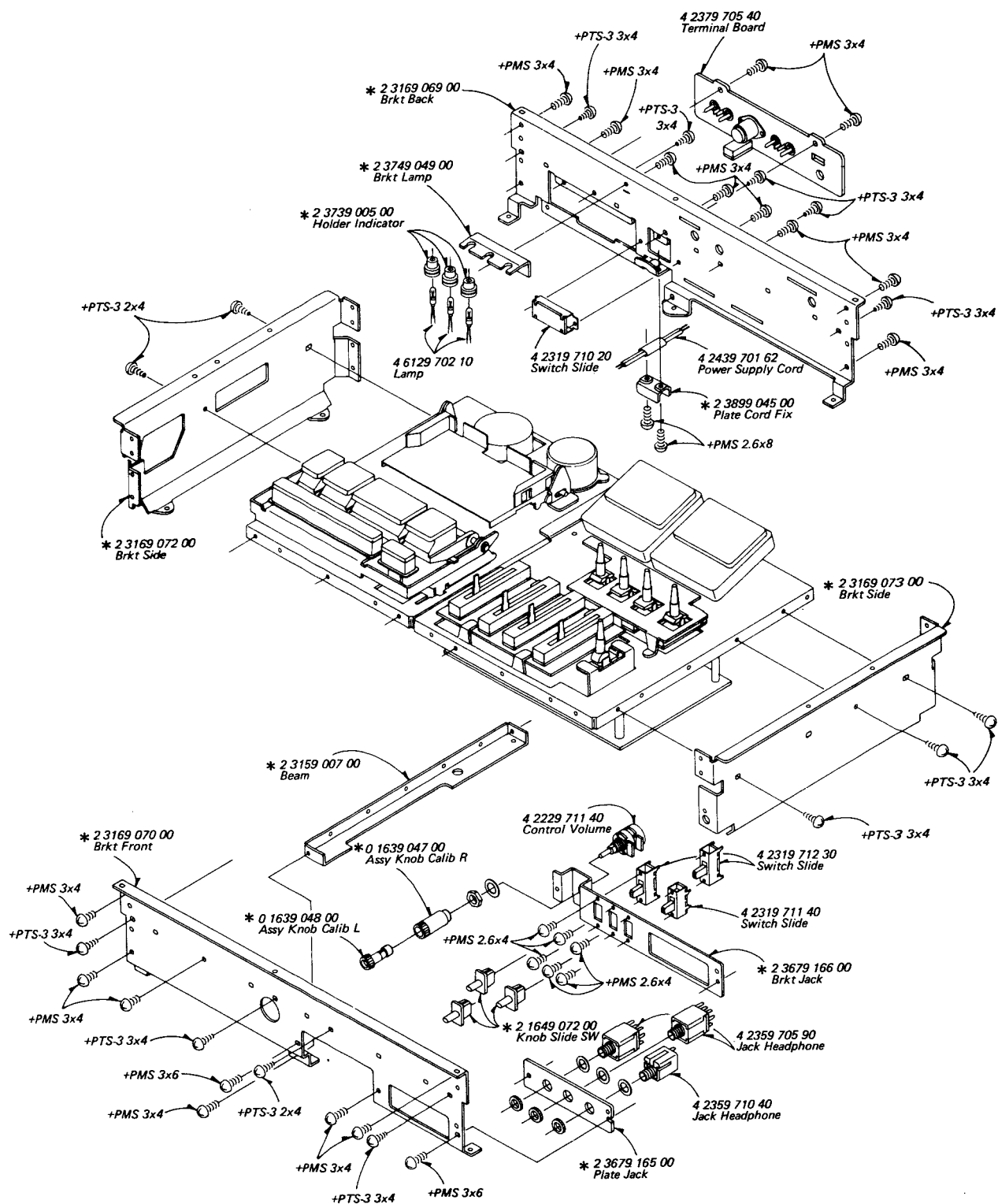
| Key No.   | Part No.         | Description               | Q'ty |
|-----------|------------------|---------------------------|------|
| MECHANISM |                  |                           |      |
|           | 141 2 8519 24200 | Spring, Lever Lock        | 1    |
|           | 141 2 8519 26600 | Spring Brake              | 1    |
|           | 141 2 8519 27200 | Spring, Azimuth           | 1    |
|           | 141 2 8519 37900 | Spring, Lever Roller      | 1    |
|           | 141 2 8519 44500 | Spring, Tension Arm       | 1    |
|           | 141 2 8519 44700 | Spring, Stopper Base      | 1    |
|           | 141 2 8519 45300 | Spring, Cassette Up       | 1    |
|           | 141 2 8519 45400 | Spring, Lock Lid Cassette | 1    |
|           | 141 2 8519 49500 | Spring, Actuator          | 1    |
|           | 141 2 8519 50900 | Spring, Fix Head          | 2    |
|           | 141 2 8519 50900 | Spring, Fix Head          | 2    |
|           | 141 2 8519 51000 | Spring, Adjustor Base     | 1    |
|           | 141 2 8519 51100 | Spring                    | 1    |
|           | 141 2 8519 51100 | Spring                    | 1    |
|           | 141 2 3519 20500 | Bracket, Counter          | 1    |
|           | 141 2 8119 01700 | Counter                   | 1    |
|           | 141 0 1619 12200 | Button Assy Select        | 1    |
|           | 141 0 6139 00400 | Button Assy Pause         | 1    |
|           | 141 0 3129 00700 | Sub Chassis Assy          | 1    |
|           | 141 2 2419 14000 | Cover Indicator           | 2    |
|           | 141 2 3159 00700 | Beam                      | 1    |
|           | 141 2 3169 06900 | Bracket Back              | 1    |
|           | 141 2 3169 07000 | Bracket Front             | 1    |
|           | 141 2 3169 07200 | Bracket Side              | 1    |
|           | 141 2 3169 07300 | Bracket Side              | 1    |
|           | 141 2 3229 18500 | Shield Plate              | 1    |
|           | 141 2 3659 06700 | Bracket Switch            | 1    |
|           | 141 2 3679 16500 | Plate Jack                | 1    |
|           | 141 2 3679 16600 | Bracket Jack              | 1    |
|           | 141 2 3719 02600 | Bracket Trans             | 1    |
|           | 141 2 3739 00500 | Holder Indicator          | 3    |
|           | 141 2 3749 04900 | Bracket Lamp              | 1    |
|           | 141 2 3799 02600 | Pulley Motor              | 1    |
|           | 141 2 3899 04500 | Plate Cord Fix            | 1    |
|           | 141 2 4619 05300 | Tube                      | 4    |
|           | 141 2 4729 00600 | Lug                       | 1    |
|           | 141 2 4729 01000 | Lug                       | 4    |
|           | 141 2 5369 01900 | Bracket Switch Pause      | 1    |
|           | 141 2 5519 12200 | Pulley Counter            | 1    |
|           | 141 2 5619 01000 | Belt                      | 1    |
|           | 141 2 5649 01800 | Belt, Counter             | 1    |
|           | 141 2 5649 02500 | Belt, Counter             | 1    |
|           | 141 2 5649 03900 | Belt                      | 1    |
|           | 141 2 5649 04000 | Belt                      | 1    |
|           | 141 2 5649 04100 | Belt                      | 1    |
|           | 141 2 8219 15600 | Stopper Ball              | 3    |
|           | 141 2 8219 15700 | Guide Ball                | 2    |
|           | 141 2 8219 15800 | Guide Ball                | 1    |
|           | 141 2 8259 00100 | Ball                      | 1    |
|           | 141 2 8259 00100 | Ball                      | 3    |
|           | 141 2 8259 00100 | Ball                      | 2    |
|           | 141 2 8419 05400 | Interlock Lever           | 1    |
|           | 141 2 8539 01700 | Spring Interlock Lever    | 1    |
|           | 141 2 8539 20600 | Spring Cassette           | 1    |
|           | 141 6 4549 03000 | Label Fuse                | 1    |
|           | 141 6 4549 03600 | Label Fuse                | 1    |

# EXPLODED VIEW

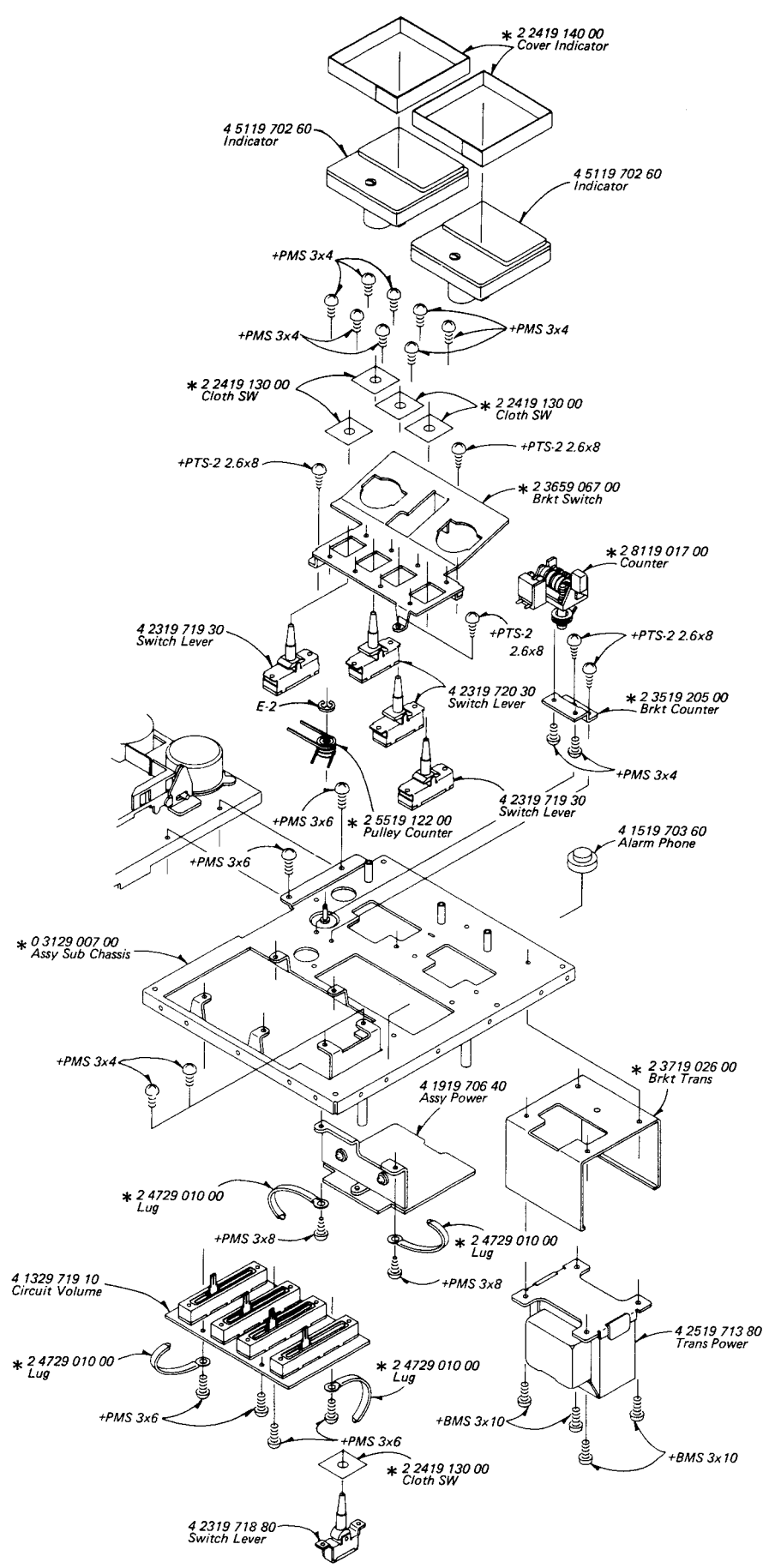




\_\_\_\_\_



EXPLODED VIEW





# PARTS LIST

| Key No.          | Part No.         | Description                  | Q'ty |
|------------------|------------------|------------------------------|------|
| ELECTRICAL PARTS |                  |                              |      |
| VR05             | 4 2229 71140     | Control Volume               | 1    |
| C605             | 4 2239 70180     | Capacitor                    | 1    |
|                  | 4 2269 76760     | PCB Mike                     | 1    |
| S301             | 4 2269 76770     | PCB SW A                     | 1    |
| S303             | 4 2269 76780     | PCB SW B                     | 1    |
| S306             | 4 2269 76880     | PCB SW C                     | 1    |
| S110             | 4 2319 70511     | Switch, Micro                | 1    |
| S701             | 4 2319 70511     | Switch, Micro                | 1    |
| S401             | 4 2319 71020     | Switch, Slide                | 1    |
| S706             | 4 2319 71140     | Switch, Slide                | 1    |
| S303             | 4 2319 71230     | Switch Slide                 | 1    |
| S402             | 4 2319 71880     | Switch Lever                 | 1    |
| S301, 707        | 4 2319 71930     | Switch Lever                 | 2    |
| S305             | 4 2319 72030     | Switch Lever                 | 1    |
|                  | 4 2359 70590     | Jack Headphone               | 2    |
|                  | 4 2359 71040     | Jack Headphone               | 1    |
|                  | 4 2359 71620     | Connector Assy 13P           | 1    |
|                  | 4 2359 71630     | Connector Assy 4P            | 1    |
|                  | 4 2359 71640     | Connector Assy 3P            | 1    |
|                  | 4 2359 71650     | Connector Assy 4P            | 1    |
|                  | 4 2359 71660     | Connector Assy 10P           | 1    |
|                  | 4 2359 71670     | Connector Assy               | 1    |
|                  | 4 2359 71680     | Connector Assy 18P           | 1    |
|                  | 4 2359 71690     | Connector Assy 18P           | 1    |
|                  | 4 2359 71830     | Connector Assy 5P            | 1    |
|                  | 4 2359 71840     | Connector Assy 5P            | 1    |
|                  | 4 2359 71850     | Connector Assy               | 1    |
|                  | 4 2379 70110     | Solderless Terminal          | 1    |
|                  | 4 2379 70280     | Lug 3P                       | 1    |
|                  | 4 2379 70410     | Lug 4P                       | 1    |
|                  | 4 2379 70540     | Terminal Board               | 1    |
|                  | 4 2429 70280     | Eraser Head                  | 1    |
|                  | 4 2429 70751     | Monitor Head                 | 1    |
|                  | 4 2429 70760     | R/P Head                     | 1    |
|                  | 4 2439 70162     | Power Supply Cord            | 1    |
|                  | 4 2519 71380     | Trans Power                  | 1    |
|                  | 4 2649 70140     | Plunger                      | 1    |
|                  | 4 5119 70260     | Indicator                    | 2    |
|                  | 4 5279 70412     | Motor                        | 1    |
|                  | 4 5279 70590     | Motor                        | 1    |
|                  | 4 6129 70210     | Lamp                         | 3    |
| R115             | RD1 0 3251 KH000 | Carbon 10K ohm ±10% 1/4W     | 1    |
| R215             | RD1 0 3251 KH000 | Carbon 10K ohm ±10% 1/4W     | 1    |
| R121             | RD2 2 2251 KV000 | Carbon 2.2K ohm ±10% 1/4W    | 1    |
| R221             | RD2 2 2251 KV000 | Carbon 2.2K ohm ±10% 1/4W    | 1    |
| R102             | RD8 2 3251 KV000 | Carbon 82K ohm ±10% 1/4W     | 1    |
| R202             | RD8 2 3251 KV000 | Carbon 82K ohm ±10% 1/4W     | 1    |
| R315             | RH2 7 1103 KH000 | Metal oxide 270 ohm ±10% 10W | 1    |
| R317             | RH3 9 1103 KH000 | Metal oxide 390 ohm ±10% 10W | 1    |
| R316             | RH4 7 1103 KH000 | Metal oxide 470 ohm ±10% 10W | 1    |
| CONTROL PCB ASSY |                  |                              |      |
| AL01             | 4 1329 71820     | Control, PCB Assy            | 1    |
| D403             | 4 1519 70360     | Alarm Phone                  | 1    |
| D406             | 4 2029 70160     | Diode 1S953                  | 1    |
| D404             | 4 2029 70160     | Diode 1S953                  | 1    |
| D407             | 4 2029 70160     | Diode 1S953                  | 1    |
| D408             | 4 2029 70160     | Diode 1S953                  | 1    |
| D410             | 4 2029 70160     | Diode 1S953                  | 1    |
| D409             | 4 2029 70160     | Diode 1S953                  | 1    |
| D401             | 4 2029 70160     | Diode 1S953                  | 1    |
| D402             | 4 2029 70160     | Diode 1S953                  | 1    |
| P401             | 4 2229 72650     | Potentiometer                | 1    |
| RE01             | 4 2319 71370     | Switch                       | 1    |
|                  | 4 2369 71070     | Connector 13P                | 1    |
| C420             | CC1 0 2500 KE00C | Ceramic 0.001mF ±10% 50V     | 1    |
| C403             | CD1 0 5250 0000V | Electrolytic 1mF 25V         | 1    |
| C419             | CD1 0 5250 0000V | Electrolytic 1mF 25V         | 1    |
| C413             | CD1 0 5250 0000V | Electrolytic 1mF 25V         | 1    |
| C421             | CD1 0 5250 0000V | Electrolytic 1mF 25V         | 1    |
| C401             | CD1 0 6250 0000V | Electrolytic 10mF 25V        | 1    |
| C418             | CD1 0 663A 0000V | Electrolytic 10mF 6.3V       | 1    |
| C404             | CD1 0 7250 0000V | Electrolytic 100mF 25V       | 1    |
| C408             | CD1 0 7250 0000V | Electrolytic 100mF 25V       | 1    |
| C402             | CD1 0 763A 0000V | Electrolytic 100mF 6.3V      | 1    |
| C405             | CD1 0 8250 0000V | Electrolytic 1000mF 25V      | 1    |

| Key No.          | Part No.         | Description                  | Q'ty |
|------------------|------------------|------------------------------|------|
| CONTROL PCB ASSY |                  |                              |      |
| C406             | CD1 0 8250 0000V | Electrolytic 1000mF 25V      | 1    |
| C411             | CD4 7 6160 0000V | Electrolytic 47mF 16V        | 1    |
| C407             | CD4 7 7250 0000V | Electrolytic 470mF 25V       | 1    |
| C410             | CD4 7 731A 0000V | Electrolytic 470mF 31V       | 1    |
| C414             | CM1 0 3500 K00SV | Mylar 0.01mF ±10% 50V        | 1    |
| C414             | CM1 0 3500 K00NV | Mylar 0.01mF ±10% 50V        | 1    |
| C415             | CM1 0 3500 K00SV | Mylar 0.01mF ±10% 50V        | 1    |
| C415             | CM1 0 3500 K00NV | Mylar 0.01mF ±10% 50V        | 1    |
| C416             | CM1 0 3500 K00SV | Mylar 0.01mF ±10% 50V        | 1    |
| C416             | CM1 0 3500 K00NV | Mylar 0.01mF ±10% 50V        | 1    |
| C417             | CM1 0 3500 K00SV | Mylar 0.01mF ±10% 50V        | 1    |
| C417             | CM1 0 3500 K00NV | Mylar 0.01mF ±10% 50V        | 1    |
| C409             | CT4 7 663A K00DV | Tantal 47mF ±10% 6.3V        | 1    |
| R405             | RD1 0 1251 JV000 | Carbon 100 ohm ±5% 1/4W      | 1    |
| R414             | RD1 0 2251 JV000 | Carbon 1K ohm ±5% 1/4W       | 1    |
| R420             | RD1 0 2251 JV000 | Carbon 1K ohm ±5% 1/4W       | 1    |
| R404             | RD1 0 3251 JV000 | Carbon 10K ohm ±5% 1/4W      | 1    |
| R425             | RD1 0 3251 JV000 | Carbon 10K ohm ±5% 1/4W      | 1    |
| R439             | RD1 0 4251 JV000 | Carbon 100K ohm ±5% 1/4W     | 1    |
| R418             | RD1 2 1251 JV000 | Carbon 120 ohm ±5% 1/4W      | 1    |
| R408             | RD1 2 2251 JV000 | Carbon 1.2K ohm ±5% 1/4W     | 1    |
| R410             | RD1 2 2251 JV000 | Carbon 1.2K ohm ±5% 1/4W     | 1    |
| R423             | RD1 2 3251 JV000 | Carbon 12K ohm ±5% 1/4W      | 1    |
| R416             | RD1 2 4251 JV000 | Carbon 120K ohm ±5% 1/4W     | 1    |
| R419             | RD1 2 4251 JV000 | Carbon 120K ohm ±5% 1/4W     | 1    |
| R417             | RD1 5 2251 JV000 | Carbon 1.5K ohm ±5% 1/4W     | 1    |
| R426             | RD1 5 2251 JV000 | Carbon 1.5K ohm ±5% 1/4W     | 1    |
| R406             | RD1 5 4251 JV000 | Carbon 150K ohm ±5% 1/4W     | 1    |
| R421             | RD1 8 4251 JV000 | Carbon 180K ohm ±5% 1/4W     | 1    |
| R401             | RD2 2 0251 JV000 | Carbon 22 ohm ±5% 1/4W       | 1    |
| R427             | RD2 2 0251 JV000 | Carbon 22 ohm ±5% 1/4W       | 1    |
| R407             | RD2 2 2251 JV000 | Carbon 2.2K ohm ±5% 1/4W     | 1    |
| R422             | RD2 2 3251 JV000 | Carbon 22K ohm ±5% 1/4W      | 1    |
| R437             | RD2 2 3251 JV000 | Carbon 22K ohm ±5% 1/4W      | 1    |
| R411             | RD2 7 1251 JV000 | Carbon 270 ohm ±5% 1/4W      | 1    |
| R436             | RD2 7 1251 JV000 | Carbon 270 ohm ±5% 1/4W      | 1    |
| R430             | RD2 7 2251 JV000 | Carbon 2.7K ohm ±5% 1/4W     | 1    |
| R402             | RD2 7 3251 JV000 | Carbon 27K ohm ±5% 1/4W      | 1    |
| R403             | RD2 7 3251 JV000 | Carbon 27K ohm ±5% 1/4W      | 1    |
| R415             | RD2 7 4251 JV000 | Carbon 270K ohm ±5% 1/4W     | 1    |
| R432             | RD2 7 4251 JV000 | Carbon 270K ohm ±5% 1/4W     | 1    |
| R412             | RD3 3 2251 JV000 | Carbon 3.3K ohm ±5% 1/4W     | 1    |
| R424             | RD3 3 2251 JV000 | Carbon 3.3K ohm ±5% 1/4W     | 1    |
| R434             | RD4 7 1251 JV000 | Carbon 470 ohm ±5% 1/4W      | 1    |
| R438             | RD4 7 3251 JV000 | Carbon 47K ohm ±5% 1/4W      | 1    |
| R409             | RD5 6 3251 JV000 | Carbon 56K ohm ±5% 1/4W      | 1    |
| R433             | RD5 6 3251 JV000 | Carbon 56K ohm ±5% 1/4W      | 1    |
| R429             | RD6 8 2251 JV000 | Carbon 6.8K ohm ±5% 1/4W     | 1    |
| R431             | RD6 8 2251 JV000 | Carbon 6.8K ohm ±5% 1/4W     | 1    |
| R428             | RD6 8 2251 JV000 | Carbon 6.8K ohm ±5% 1/4W     | 1    |
| R435             | RD8 2 1251 JV000 | Carbon 820 ohm ±5% 1/4W      | 1    |
| R413             | RH1 0 1102 KH000 | Metal oxide 100K ohm ±10% 1W | 1    |
| D405             | 202 5 9410 01010 | Diode 10D-1                  | 1    |
| D411             | 202 5 9410 01010 | Diode 10D-1                  | 1    |
| Q408             | 203 5 0200 18740 | Transistor 2SB187            | 1    |
| Q409             | 203 5 0800 18740 | Transistor 2SD187            | 1    |
| Q401             | 203 5 5100 53660 | Transistor 2SC 536           | 1    |
| Q402             | 203 5 5100 53660 | Transistor 2SC 536           | 1    |
| Q405             | 203 5 5100 53670 | Transistor 2SC 536           | 1    |
| Q406             | 203 5 5100 53670 | Transistor 2SC 536           | 1    |
| Q404             | 203 5 6430 51140 | Transistor 2SB 511           | 1    |
| Q403             | 203 5 6800 65960 | Transistor 2SA659            | 1    |
| Q407             | 203 5 6800 65960 | Transistor 2SA659F           | 1    |
|                  | 4 1519 70360     | Alarm Phone                  | 1    |
| POWER PCB ASSY   |                  |                              |      |
| D602             | 4 1919 70640     | Power PCB Assy               | 1    |
| D601             | 4 2029 70160     | Diode 1S953                  | 1    |
| D604             | 4 2029 70160     | Diode 1S953                  | 1    |
| D603             | 4 2029 70290     | Diode WZ-120                 | 1    |
| D603             | 4 2029 70360     | Diode WZ-210                 | 1    |
| D601             | 4 2039 70093     | Transistor 2SD227            | 1    |
| F602             | 4 2349 70140     | Fuse                         | 1    |
| F601             | 4 2349 70140     | Fuse                         | 1    |
| H601             | 4 2359 70910     | Holder Fuse                  | 2    |
| H602             | 4 2359 70910     | Holder Fuse                  | 2    |
| C601             | CD1 0 7250 0000V | Electrolytic 100mF 25V       | 1    |
| C604             | CD1 0 8250 0000V | Electrolytic 1000mF 25V      | 1    |

# PARTS LIST

| Key No.            | Part No.         | Description                 | Q'ty |
|--------------------|------------------|-----------------------------|------|
| POWER PCB ASSY     |                  |                             |      |
| C602               | CD1 0 8350 0000V | Electrolytic 1000mF 35V     | 1    |
| C603               | CD4 7 7160 0000V | Electrolytic 470mF 16V      | 1    |
| R601               | RD5 6 2251 KH000 | Carbon 5.6K ohm ±10% 1/4W   | 1    |
| R602               | RH2 7 1102 KH000 | Metal oxide 270 ohm ±10% 1W | 1    |
| D605               | 202 5 2300 01710 | Diode DS 17                 | 1    |
| D607               | 202 5 2300 01710 | Diode DS 17                 | 1    |
| D608               | 202 5 2300 01810 | Diode DS 18                 | 1    |
| D606               | 202 5 2300 01810 | Diode DS 18                 | 1    |
| Q602               | 203 5 6440 50750 | Transistor 2SB507           | 1    |
| Q603               | 203 5 8310 31360 | Transistor 2SD313           | 1    |
| AUDIO AMP PCB ASSY |                  |                             |      |
| Q301               | 4 1329 71620     | Dolby Unit                  | 2    |
|                    | 4 1329 71890     | Audio Amp PCB Assy          | 1    |
| P102               | 4 2039 70100     | Transistor 2SC945           | 1    |
| P205               | 4 2229 72360     | Potentiometer               | 1    |
| P301               | 4 2229 72360     | Potentiometer               | 1    |
| P302               | 4 2229 72360     | Potentiometer               | 1    |
| P103               | 4 2229 72360     | Potentiometer               | 1    |
| P201               | 4 2229 72360     | Potentiometer               | 1    |
| P202               | 4 2229 72360     | Potentiometer               | 1    |
| P203               | 4 2229 72360     | Potentiometer               | 1    |
| P104               | 4 2229 72360     | Potentiometer               | 1    |
| P101               | 4 2229 72360     | Potentiometer               | 1    |
| P105               | 4 2229 72360     | Potentiometer               | 1    |
| P204               | 4 2229 72360     | Potentiometer               | 1    |
| S100               | 4 2319 71960     | Switch Slide                | 1    |
| S200               | 4 2319 71960     | Switch Slide                | 1    |
| T101               | 4 2359 71600     | Connector 6P                | 1    |
|                    | 4 2359 71600     | Connector 6P                | 1    |
| T201               | 4 2549 70150     | Matching Trans.             | 1    |
| L104               | 4 2729 70090     | Coil                        | 1    |
| L201               | 4 2729 70090     | Coil                        | 1    |
| L204               | 4 2729 70090     | Coil                        | 1    |
| L101               | 4 2729 70090     | Coil                        | 1    |
| C326               | CA1 0 5100 M000V | Alcicon 1mF ±20% 10V        | 1    |
| C171               | CA4 7 4100 M000V | Alcicon 0.47mF ±20% 10V     | 1    |
| C271               | CA4 7 4100 M000V | Alcicon 0.47mF ±20% 10V     | 1    |
| C203               | CC1 0 1500 KD00C | Ceramic 100pF ±10% 50V      | 1    |
| C158               | CC1 0 1500 KD00C | Ceramic 100pF ±10% 50V      | 1    |
| C103               | CC1 0 1500 KD00C | Ceramic 100pF ±10% 50V      | 1    |
| C258               | CC1 0 1500 KD00C | Ceramic 100pF ±10% 50V      | 1    |
| C156               | CC1 2 2500 KE00C | Ceramic 0.0012mF ±10% 50V   | 1    |
| C256               | CC1 2 2500 KE00C | Ceramic 0.0012mF ±10% 50V   | 1    |
| C210               | CC2 2 1500 KD00C | Ceramic 220pF ±10% 50V      | 1    |
| C165               | CC2 2 1500 KD00C | Ceramic 220pF ±10% 50V      | 1    |
| C110               | CC2 2 1500 KD00C | Ceramic 220pF ±10% 50V      | 1    |
| C265               | CC2 2 1500 KD00C | Ceramic 220pF ±10% 50V      | 1    |
| C166               | CC2 2 2500 KE00C | Ceramic 0.0022mF ±10% 50V   | 1    |
| C266               | CC2 2 2500 KE00C | Ceramic 0.0022mF ±10% 50V   | 1    |
| C117               | CC3 3 1500 KD00C | Ceramic 330pF ±10% 50V      | 1    |
| C217               | CC3 3 1500 KD00C | Ceramic 330pF ±10% 50V      | 1    |
| C211               | CC3 3 1500 KE00C | Ceramic 330pF ±10% 50V      | 1    |
| C111               | CC3 3 1500 KE00C | Ceramic 330pF ±10% 50V      | 1    |
| C160               | CC6 8 0500 KD00C | Ceramic 68pF ±10% 50V       | 1    |
| C105               | CC6 8 0500 KD00C | Ceramic 68pF ±10% 50V       | 1    |
| C260               | CC6 8 0500 KD00C | Ceramic 68pF ±10% 50V       | 1    |
| C205               | CC6 8 0500 KD00C | Ceramic 68pF ±10% 50V       | 1    |
| C277               | CD1 0 5100 0000V | Electrolytic 1mF 10V        | 1    |
| C177               | CD1 0 5100 0000V | Electrolytic 1mF 10V        | 1    |
| C116               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C112               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C151               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C152               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C154               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C118               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C113               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C107               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C108               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C273               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C274               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C269               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C306               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C272               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C275               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C252               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |
| C254               | CD1 0 6160 0000V | Electrolytic 10mF 16V       | 1    |

| Key No.            | Part No.         | Description              | Q'ty |
|--------------------|------------------|--------------------------|------|
| AUDIO AMP PCB ASSY |                  |                          |      |
| C212               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C216               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C262               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C263               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C218               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C251               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C213               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C267               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C172               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C167               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C162               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C173               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C163               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C174               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C169               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C175               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C207               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C208               | CD1 0 6160 0000V | Electrolytic 10mF 16V    | 1    |
| C115               | CD1 0 7160 0000V | Electrolytic 100mF 16V   | 1    |
| C215               | CD1 0 7160 0000V | Electrolytic 100mF 16V   | 1    |
| C276               | CD2 2 763A 0000V | Electrolytic 220mF 6.3V  | 1    |
| C176               | CD2 2 763A 0000V | Electrolytic 220mF 6.3V  | 1    |
| C291               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C301               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C155               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C104               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C114               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C101               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C159               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C214               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C259               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C255               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C201               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C204               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C191               | CD4 7 6160 0000V | Electrolytic 47mF 16V    | 1    |
| C287               | CD4 7 6250 0000V | Electrolytic 47mF 25V    | 1    |
| C288               | CD4 7 6250 0000V | Electrolytic 47mF 25V    | 1    |
| C270               | CD4 7 6250 0000V | Electrolytic 47mF 25V    | 1    |
| C187               | CD4 7 6250 0000V | Electrolytic 47mF 25V    | 1    |
| C188               | CD4 7 6250 0000V | Electrolytic 47mF 25V    | 1    |
| C170               | CD4 7 6250 0000V | Electrolytic 47mF 25V    | 1    |
| C302               | CD4 7 663A 0000V | Electrolytic 47mF 6.3V   | 1    |
| C290               | CD4 7 663A 0000V | Electrolytic 47mF 6.3V   | 1    |
| C119               | CD4 7 663A 0000V | Electrolytic 47mF 6.3V   | 1    |
| C161               | CD4 7 663A 0000V | Electrolytic 47mF 6.3V   | 1    |
| C219               | CD4 7 663A 0000V | Electrolytic 47mF 6.3V   | 1    |
| C261               | CD4 7 663A 0000V | Electrolytic 47mF 6.3V   | 1    |
| C190               | CD4 7 663A 0000V | Electrolytic 47mF 6.3V   | 1    |
| C206               | CD4 7 663A 0000V | Electrolytic 47mF 6.3V   | 1    |
| C268               | CD4 7 663A 0000V | Electrolytic 47mF 6.3V   | 1    |
| C106               | CD4 7 663A 0000V | Electrolytic 47mF 6.3V   | 1    |
| C168               | CD4 7 663A 0000V | Electrolytic 47mF 6.3V   | 1    |
| C304               | CM1 5 3500 K00SV | Mylar 0.015mF ±10% 50V   | 1    |
| C305               | CM1 5 3500 K00SV | Mylar 0.015mF ±10% 50V   | 1    |
| C303               | CM1 5 3500 K00SV | Mylar 0.015mF ±10% 50V   | 1    |
| C193               | CM3 3 2500 K00SV | Mylar 0.0033mF ±10% 50V  | 1    |
| C293               | CM3 3 2500 K00SV | Mylar 0.0033mF ±10% 50V  | 1    |
| C264               | CM3 9 3500 K00SV | Mylar 0.039mF ±10% 50V   | 1    |
| C164               | CM3 9 3500 K00SV | Mylar 0.039mF ±10% 50V   | 1    |
| C209               | CM5 6 3500 K00SV | Mylar 0.056mF ±10% 50V   | 1    |
| C109               | CM5 6 3500 K00SV | Mylar 0.056mF ±10% 50V   | 1    |
| C202               | CT1 0 6160 W00DV | Tantal 10mF +50 -20% 16V | 1    |
| C257               | CT1 0 6160 W00DV | Tantal 10mF +50 -20% 16V | 1    |
| C102               | CT1 0 6160 W00DV | Tantal 10mF +50 -20% 16V | 1    |
| C157               | CT1 0 6160 W00DV | Tantal 10mF +50 -20% 16V | 1    |
| R261               | RD1 0 1251 KV000 | Carbon 100 ohm ±10% 1/4W | 1    |
| R161               | RD1 0 1251 KV000 | Carbon 100 ohm ±10% 1/4W | 1    |
| R183               | RD1 0 2251 KV000 | Carbon 1K ohm ±10% 1/4W  | 1    |
| R283               | RD1 0 2251 KV000 | Carbon 1K ohm ±10% 1/4W  | 1    |
| R310               | RD1 0 3251 KV000 | Carbon 10K ohm ±10% 1/4W | 1    |
| R311               | RD1 0 3251 KV000 | Carbon 10K ohm ±10% 1/4W | 1    |
| R218               | RD1 0 3251 KV000 | Carbon 10K ohm ±10% 1/4W | 1    |
| R260               | RD1 0 3251 KV000 | Carbon 10K ohm ±10% 1/4W | 1    |
| R303               | RD1 0 3251 KV000 | Carbon 10K ohm ±10% 1/4W | 1    |
| R103               | RD1 0 3251 KV000 | Carbon 10K ohm ±10% 1/4W | 1    |
| R124               | RD1 0 3251 KV000 | Carbon 10K ohm ±10% 1/4W | 1    |
| R118               | RD1 0 3251 KV000 | Carbon 10K ohm ±10% 1/4W | 1    |
| R160               | RD1 0 3251 KV000 | Carbon 10K ohm ±10% 1/4W | 1    |
| R224               | RD1 0 3251 KV000 | Carbon 10K ohm ±10% 1/4W | 1    |
| R203               | RD1 0 3251 KV000 | Carbon 10K ohm ±10% 1/4W | 1    |

# PARTS LIST

| Key No.            | Part No.         | Description               | Q'ty |
|--------------------|------------------|---------------------------|------|
| AUDIO AMP PCB ASSY |                  |                           |      |
| R105               | RD1 0 4251 KV000 | Carbon 100K ohm ±10% 1/4W | 1    |
| R158               | RD1 0 4251 KV000 | Carbon 100K ohm ±10% 1/4W | 1    |
| R528               | RD1 0 4251 KV000 | Carbon 100K ohm ±10% 1/4W | 1    |
| R205               | RD1 0 4251 KV000 | Carbon 100K ohm ±10% 1/4W | 1    |
| R108               | RD1 2 1251 KV000 | Carbon 120 ohm ±10% 1/4W  | 1    |
| R208               | RD1 2 1251 KV000 | Carbon 120 ohm ±10% 1/4W  | 1    |
| R277               | RD1 2 3251 KV000 | Carbon 12K ohm ±10% 1/4W  | 1    |
| R169               | RD1 2 3251 KV000 | Carbon 12K ohm ±10% 1/4W  | 1    |
| R269               | RD1 2 3251 KV000 | Carbon 12K ohm ±10% 1/4W  | 1    |
| R177               | RD1 2 3251 KV000 | Carbon 12K ohm ±10% 1/4W  | 1    |
| R276               | RD1 2 4251 KV000 | Carbon 120K ohm ±10% 1/4W | 1    |
| R168               | RD1 2 4251 KV000 | Carbon 120K ohm ±10% 1/4W | 1    |
| R268               | RD1 2 4251 KV000 | Carbon 120K ohm ±10% 1/4W | 1    |
| R176               | RD1 2 4251 KV000 | Carbon 120K ohm ±10% 1/4W | 1    |
| R125               | RD1 5 2251 KV000 | Carbon 1.5K ohm ±10% 1/4W | 1    |
| R225               | RD1 5 2251 KV000 | Carbon 1.5K ohm ±10% 1/4W | 1    |
| R298               | RD1 5 4251 KV000 | Carbon 150K ohm ±10% 1/4W | 1    |
| R198               | RD1 5 4251 KV000 | Carbon 150K ohm ±10% 1/4W | 1    |
| R295               | RD2 2 1251 KV000 | Carbon 220 ohm ±10% 1/4W  | 1    |
| R195               | RD2 2 1251 KV000 | Carbon 220 ohm ±10% 1/4W  | 1    |
| R116               | RD2 2 4251 KV000 | Carbon 220K ohm ±10% 1/4W | 1    |
| R301               | RD2 2 4251 KV000 | Carbon 220K ohm ±10% 1/4W | 1    |
| R216               | RD2 2 4251 KV000 | Carbon 220K ohm ±10% 1/4W | 1    |
| R279               | RD2 7 1251 KV000 | Carbon 270 ohm ±10% 1/4W  | 1    |
| R179               | RD2 7 1251 KV000 | Carbon 270 ohm ±10% 1/4W  | 1    |
| R178               | RD2 7 2251 KV000 | Carbon 2.7K ohm ±10% 1/4W | 1    |
| R270               | RD2 7 2251 KV000 | Carbon 2.7K ohm ±10% 1/4W | 1    |
| R170               | RD2 7 2251 KV000 | Carbon 2.7K ohm ±10% 1/4W | 1    |
| R278               | RD2 7 2251 KV000 | Carbon 2.7K ohm ±10% 1/4W | 1    |
| R251               | RD3 3 1251 KV000 | Carbon 330 ohm ±10% 1/4W  | 1    |
| R271               | RD3 3 1251 KV000 | Carbon 330 ohm ±10% 1/4W  | 1    |
| R256               | RD3 3 1251 KV000 | Carbon 330 ohm ±10% 1/4W  | 1    |
| R156               | RD3 3 1251 KV000 | Carbon 330 ohm ±10% 1/4W  | 1    |
| R171               | RD3 3 1251 KV000 | Carbon 330 ohm ±10% 1/4W  | 1    |
| R151               | RD3 3 1251 KV000 | Carbon 330 ohm ±10% 1/4W  | 1    |
| R179               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R184               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R182               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R219               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R274               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R255               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R257               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R282               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R297               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R284               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R304               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R119               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R174               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R155               | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R210               | RD3 3 3251 KV000 | Carbon 33K ohm ±10% 1/4W  | 1    |
| R263               | RD3 3 3251 KV000 | Carbon 33K ohm ±10% 1/4W  | 1    |
| R110               | RD3 3 3251 KV000 | Carbon 33K ohm ±10% 1/4W  | 1    |
| R157               | RD3 3 3251 KV000 | Carbon 33K ohm ±10% 1/4W  | 1    |
| R163               | RD3 3 3251 KV000 | Carbon 33K ohm ±10% 1/4W  | 1    |
| R220               | RD3 9 2251 KV000 | Carbon 3.9K ohm ±10% 1/4W | 1    |
| R212               | RD3 9 2251 KV000 | Carbon 3.9K ohm ±10% 1/4W | 1    |
| R308               | RD3 9 2251 KV000 | Carbon 3.9K ohm ±10% 1/4W | 1    |
| R120               | RD3 9 2251 KV000 | Carbon 3.9K ohm ±10% 1/4W | 1    |
| R112               | RD3 9 2251 KV000 | Carbon 3.9K ohm ±10% 1/4W | 1    |
| R165               | RD3 9 2251 KV000 | Carbon 3.9K ohm ±10% 1/4W | 1    |
| R265               | RD3 9 2251 KV000 | Carbon 3.9K ohm ±10% 1/4W | 1    |
| R114               | RD4 7 1251 KV000 | Carbon 470 ohm ±10% 1/4W  | 1    |
| R214               | RD4 7 1251 KV000 | Carbon 470 ohm ±10% 1/4W  | 1    |
| R175               | RD4 7 2251 KV000 | Carbon 4.7K ohm ±10% 1/4W | 1    |
| R275               | RD4 7 2251 KV000 | Carbon 4.7K ohm ±10% 1/4W | 1    |
| R107               | RD4 7 3251 KV000 | Carbon 47K ohm ±10% 1/4W  | 1    |
| R109               | RD4 7 3251 KV000 | Carbon 47K ohm ±10% 1/4W  | 1    |
| R162               | RD4 7 3251 KV000 | Carbon 47K ohm ±10% 1/4W  | 1    |
| R207               | RD4 7 3251 KV000 | Carbon 47K ohm ±10% 1/4W  | 1    |
| R209               | RD4 7 3251 KV000 | Carbon 47K ohm ±10% 1/4W  | 1    |
| R262               | RD4 7 3251 KV000 | Carbon 47K ohm ±10% 1/4W  | 1    |
| R305               | RD5 6 0251 KV000 | Carbon 56 ohm ±10% 1/4W   | 1    |
| R123               | RD5 6 1251 KV000 | Carbon 560 ohm ±10% 1/4W  | 1    |
| R223               | RD5 6 1251 KV000 | Carbon 560 ohm ±10% 1/4W  | 1    |
| R167               | RD5 6 2251 KV000 | Carbon 5.6K ohm ±10% 1/4W | 1    |
| R627               | RD5 6 2251 KV000 | Carbon 5.6K ohm ±10% 1/4W | 1    |
| R309               | RD5 6 3251 KV000 | Carbon 56K ohm ±10% 1/4W  | 1    |
| R302               | RD5 6 3251 KV000 | Carbon 56K ohm ±10% 1/4W  | 1    |
| R117               | RD5 6 3251 KV000 | Carbon 56K ohm ±10% 1/4W  | 1    |
| R166               | RD5 6 3251 KV000 | Carbon 56K ohm ±10% 1/4W  | 1    |

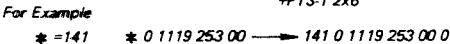
| Key No.             | Part No.         | Description               | Q'ty |
|---------------------|------------------|---------------------------|------|
| AUDIO AMP PCB ASSY  |                  |                           |      |
| R217                | RD5 6 3251 KV000 | Carbon 56K ohm ±10% 1/4W  | 1    |
| R266                | RD5 6 3251 KV000 | Carbon 56K ohm ±10% 1/4W  | 1    |
| R216                | RD6 8 2251 KV000 | Carbon 6.8K ohm ±10% 1/4W | 1    |
| R306                | RD6 8 2251 KV000 | Carbon 6.8K ohm ±10% 1/4W | 1    |
| R307                | RD6 8 2251 KV000 | Carbon 6.8K ohm ±10% 1/4W | 1    |
| R113                | RD6 8 2251 KV000 | Carbon 6.8K ohm ±10% 1/4W | 1    |
| R253                | RD6 8 3251 KV000 | Carbon 68K ohm ±10% 1/4W  | 1    |
| R280                | RD6 8 3251 KV000 | Carbon 68K ohm ±10% 1/4W  | 1    |
| R180                | RD6 8 3251 KV000 | Carbon 68K ohm ±10% 1/4W  | 1    |
| R153                | RD6 8 3251 KV000 | Carbon 68K ohm ±10% 1/4W  | 1    |
| R206                | RD6 8 4251 KV000 | Carbon 680K ohm ±10% 1/4W | 1    |
| R259                | RD6 8 4251 KV000 | Carbon 680K ohm ±10% 1/4W | 1    |
| R106                | RD6 8 4251 KV000 | Carbon 680K ohm ±10% 1/4W | 1    |
| R159                | RD6 8 4251 KV000 | Carbon 680K ohm ±10% 1/4W | 1    |
| R273                | RD8 2 1251 KV000 | Carbon 820 ohm ±10% 1/4W  | 1    |
| R173                | RD8 2 1251 KV000 | Carbon 820 ohm ±10% 1/4W  | 1    |
| R211                | RD8 2 2251 KV000 | Carbon 8.2K ohm ±10% 1/4W | 1    |
| R264                | RD8 2 2251 KV000 | Carbon 8.2K ohm ±10% 1/4W | 1    |
| R164                | RD8 2 2251 KV000 | Carbon 8.2K ohm ±10% 1/4W | 1    |
| R111                | RD8 2 2251 KV000 | Carbon 8.2K ohm ±10% 1/4W | 1    |
| R254                | RD8 2 3251 KV000 | Carbon 82K ohm ±10% 1/4W  | 1    |
| R222                | RD8 2 3251 KV000 | Carbon 82K ohm ±10% 1/4W  | 1    |
| R281                | RD8 2 3251 KV000 | Carbon 82K ohm ±10% 1/4W  | 1    |
| R181                | RD8 2 3251 KV000 | Carbon 82K ohm ±10% 1/4W  | 1    |
| R122                | RD8 2 3251 KV000 | Carbon 82K ohm ±10% 1/4W  | 1    |
| R154                | RD8 2 3251 KV000 | Carbon 82K ohm ±10% 1/4W  | 1    |
| D204                | 202 5 9110 18810 | Diode 1S 188-AM           | 1    |
| D103                | 202 5 9110 18810 | Diode 1S 188-AM           | 1    |
| D104                | 202 5 9110 18810 | Diode 1S 188-AM           | 1    |
| D203                | 202 5 9110 18810 | Diode 1S 188-AM           | 1    |
| Q103                | 203 5 5100 69351 | Transistor 2SC 693 or     | 1    |
| Q103                | 4 2039 70310     | Transistor 2SC 1648       | 1    |
| Q203                | 203 5 5100 69351 | Transistor 2SC 693 or     | 1    |
| Q203                | 4 2039 70310     | Transistor 2SC 1648       | 1    |
| Q105                | 203 5 5100 69351 | Transistor 2SC 693 or     | 1    |
| Q105                | 4 2039 70310     | Transistor 2SC 1648R      | 1    |
| Q205                | 203 5 5100 69351 | Transistor 2SC 693 or     | 1    |
| Q205                | 4 2039 70310     | Transistor 2SC 1648R      | 1    |
| Q108                | 203 5 5100 69351 | Transistor 2SC 693 or     | 1    |
| Q108                | 4 2039 70310     | Transistor 2SC 1648       | 1    |
| Q208                | 203 5 5100 69351 | Transistor 2SC 693 or     | 1    |
| Q208                | 4 2039 70310     | Transistor 2SC 1648R      | 1    |
| Q109                | 203 5 5100 69351 | Transistor 2SC 693 or     | 1    |
| Q109                | 4 2039 70310     | Transistor 2SC 1648       | 1    |
| Q209                | 203 5 5100 69351 | Transistor 2SC 693 or     | 1    |
| Q209                | 4 2039 70310     | Transistor 2SC 1648       | 1    |
| Q110                | 203 5 5100 69351 | Transistor 2SC 693 or     | 1    |
| Q110                | 4 2039 70310     | Transistor 2SC 1648       | 1    |
| Q210                | 203 5 5100 69351 | Transistor 2SC 693 or     | 1    |
| Q210                | 4 2039 70310     | Transistor 2SC 1648R      | 1    |
| Q102                | 203 5 5100 69352 | Transistor 2SC 693 or     | 1    |
| Q102                | 4 2039 70310     | Transistor 2SC 1648       | 1    |
| Q202                | 203 5 5100 69352 | Transistor 2SC 693 or     | 1    |
| Q202                | 4 2039 70310     | Transistor 2SC 1648       | 1    |
| Q107                | 203 5 5100 69352 | Transistor 2SC 693 or     | 1    |
| Q107                | 4 2039 70310     | Transistor 2SC 1648       | 1    |
| Q207                | 203 5 5100 69352 | Transistor 2SC 693 or     | 1    |
| Q207                | 4 2039 70310     | Transistor 2SC 1648       | 1    |
| Q101                | 203 5 7200 70162 | Transistor 2SA 701 or     | 1    |
| Q101                | 4 2039 70320     | Transistor 2SA 828        | 1    |
| Q201                | 203 5 7200 70162 | Transistor 2SA 701 or     | 1    |
| Q201                | 4 2039 70320     | Transistor 2SA 828R       | 1    |
| Q106                | 203 5 7200 70162 | Transistor 2SA 701 or     | 1    |
| Q106                | 4 2039 70320     | Transistor 2SA 828R       | 1    |
| Q206                | 203 5 7200 70162 | Transistor 2SA 701 or     | 1    |
| Q206                | 4 2039 70320     | Transistor 2SA 828        | 1    |
| Q111                | 206 5 4946 04010 | IC LD 6040                | 1    |
| Q211                | 206 5 4946 04010 | IC LD 6040                | 1    |
| VR CONTROL PCB ASSY |                  |                           |      |
| VR03                | 4 1329 71910     | Circuit Volume            | 1    |
| VR04                | 4 2229 70920     | Control Volume            | 1    |
| VR01                | 4 2229 70920     | Control Volume            | 1    |
| VR02                | 4 2229 71180     | Control Volume            | 1    |
| VR02                | 4 2229 71180     | Control Volume            | 1    |
| R152                | RD5 6 2251 KV000 | Carbon 5.6K ohm 10% 1/4W  | 1    |
| R252                | RD5 6 2251 KV000 | Carbon 5.6K ohm 10% 1/4W  | 1    |

# PARTS LIST

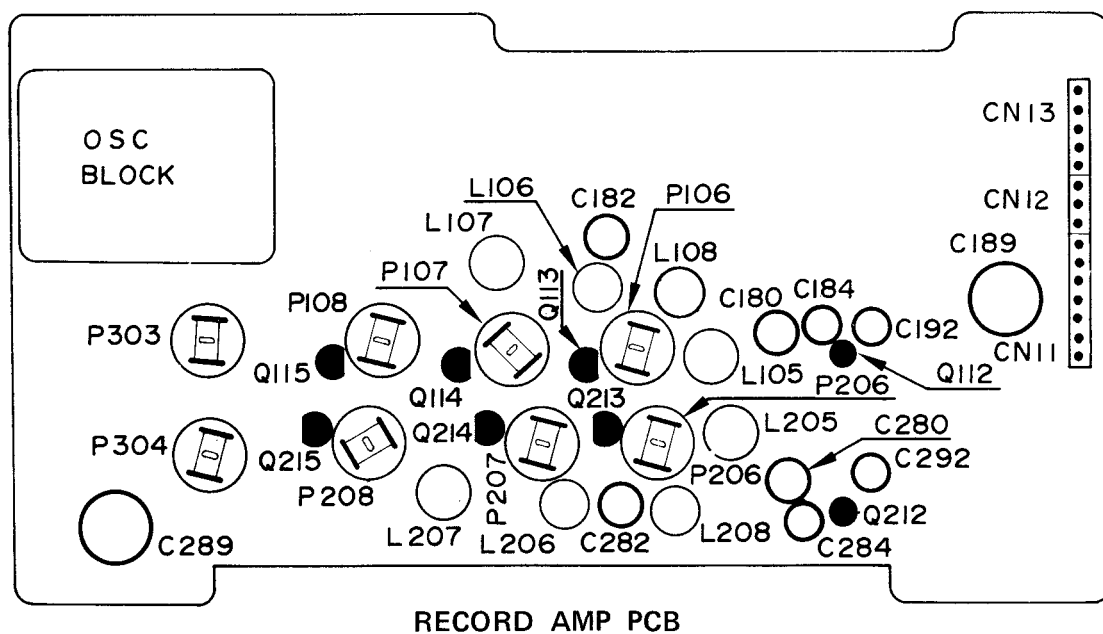
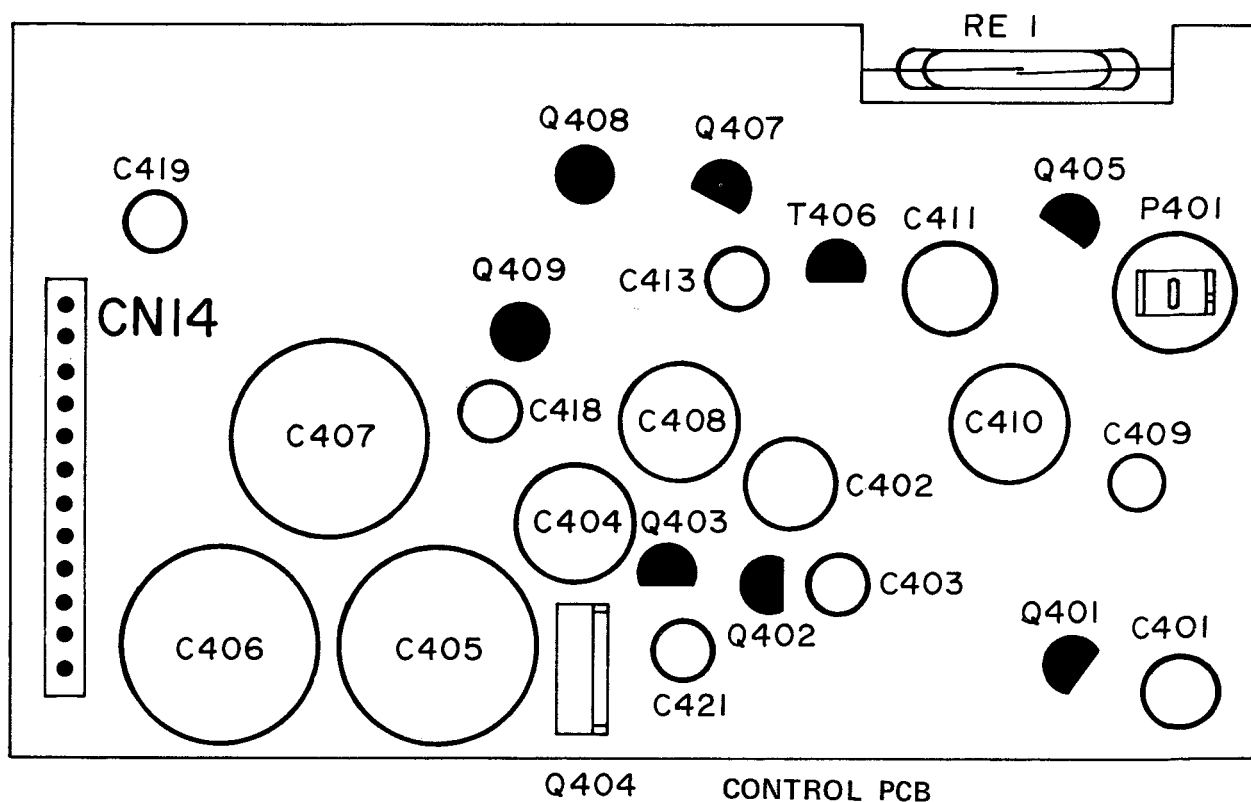
| Key No.              | Part No.         | Description               | Q'ty |
|----------------------|------------------|---------------------------|------|
| SUB CIRCUIT PCB ASSY |                  |                           |      |
|                      | 4 1329 71900     | Sub Circuit PCB Assy      | 1    |
| P303                 | 4 2229 72650     | Potentiometer             | 1    |
| P304                 | 4 2229 72650     | Potentiometer             | 1    |
| P107                 | 4 2229 72660     | Potentiometer             | 1    |
| P108                 | 4 2229 72660     | Potentiometer             | 1    |
| P206                 | 4 2229 72660     | Potentiometer             | 1    |
| P207                 | 4 2229 72660     | Potentiometer             | 1    |
| P208                 | 4 2229 72660     | Potentiometer             | 1    |
| P106                 | 4 2229 72660     | Potentiometer             | 1    |
| OSC1                 | 4 2589 71040     | OSC Block                 | 1    |
| L208                 | 4 2729 70010     | Peaking Coil              | 1    |
| L206                 | 4 2729 70010     | Peaking Coil              | 1    |
| L108                 | 4 2729 70010     | Peaking Coil              | 1    |
| L106                 | 4 2729 70010     | Peaking Coil              | 1    |
| L205                 | 4 2729 70030     | Peaking Coil              | 1    |
| L105                 | 4 2729 70030     | Peaking Coil              | 1    |
| L207                 | 4 2729 70080     | Peaking Coil              | 1    |
| L107                 | 4 2729 70080     | Peaking Coil              | 1    |
| C307                 | CC1 0 1500 KD00C | Ceramic 100pF ±10% 50V    | 1    |
| C308                 | CC1 0 1500 KD00C | Ceramic 100pF ±10% 50V    | 1    |
| C186                 | CC2 2 1500 KD00C | Ceramic 220pF ±10% 50V    | 1    |
| C286                 | CC2 2 1500 KD00C | Ceramic 220pF ±10% 50V    | 1    |
| C192                 | CD1 0 6160 0000V | Electrolytic 10mF 16V     | 1    |
| C184                 | CD1 0 6160 0000V | Electrolytic 10mF 16V     | 1    |
| C284                 | CD1 0 6160 0000V | Electrolytic 10mF 16V     | 1    |
| C292                 | CD1 0 6160 0000V | Electrolytic 10mF 16V     | 1    |
| C189                 | CD4 7 6250 0000V | Electrolytic 47mF 25V     | 1    |
| C289                 | CD4 7 6250 0000V | Electrolytic 47mF 25V     | 1    |
| C282                 | CD4 7 663A 0000V | Electrolytic 47mF 6.3V    | 1    |
| C280                 | CD4 7 663A 0000V | Electrolytic 47mF 6.3V    | 1    |
| C180                 | CD4 7 663A 0000V | Electrolytic 47mF 6.3V    | 1    |
| C182                 | CD4 7 663A 0000V | Electrolytic 47mF 6.3V    | 1    |
| C181                 | CM1 0 3500 K00SV | Mylar 0.01mF ±10% 50V     | 1    |
| C281                 | CM1 0 3500 K00SV | Mylar 0.01mF ±10% 50V     | 1    |
| C183                 | CM2 2 3500 K00SV | Mylar 0.022mF ±10% 50V    | 1    |
| C283                 | CM2 2 3500 K00SV | Mylar 0.022mF ±10% 50V    | 1    |
| C179                 | CM2 7 3500 K00SV | Mylar 0.027mF ±10% 50V    | 1    |
| C279                 | CM2 7 3500 K00SV | Mylar 0.027mF ±10% 50V    | 1    |
| R285                 | RD1 5 4251 KV000 | Carbon 150K ohm ±10% 1/4W | 1    |
| R185                 | RD1 5 4251 KV000 | Carbon 150K ohm ±10% 1/4W | 1    |
| R188                 | RD2 2 2251 KV000 | Carbon 2.2K ohm ±10% 1/4W | 1    |
| R288                 | RD2 2 2251 KV000 | Carbon 2.2K ohm ±10% 1/4W | 1    |
| R191                 | RD2 7 3251 KV000 | Carbon 27K ohm ±10% 1/4W  | 1    |
| R286                 | RD2 7 3251 KV000 | Carbon 27K ohm ±10% 1/4W  | 1    |
| R291                 | RD2 7 3251 KV000 | Carbon 27K ohm ±10% 1/4W  | 1    |
| R292                 | RD2 7 3251 KV000 | Carbon 27K ohm ±10% 1/4W  | 1    |
| R293                 | RD2 7 3251 KV000 | Carbon 27K ohm ±10% 1/4W  | 1    |
| R192                 | RD2 7 3251 KV000 | Carbon 27K ohm ±10% 1/4W  | 1    |
| R193                 | RD2 7 3251 KV000 | Carbon 27K ohm ±10% 1/4W  | 1    |
| R186                 | RD2 7 3251 KV000 | Carbon 27K ohm ±10% 1/4W  | 1    |
| R290                 | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R190                 | RD3 3 2251 KV000 | Carbon 3.3K ohm ±10% 1/4W | 1    |
| R189                 | RD4 7 2251 KV000 | Carbon 4.7K ohm ±10% 1/4W | 1    |
| R289                 | RD4 7 2251 KV000 | Carbon 4.7K ohm ±10% 1/4W | 1    |
| R294                 | RD8 2 2251 KV000 | Carbon 8.2K ohm ±10% 1/4W | 1    |
| R287                 | RD8 2 2251 KV000 | Carbon 8.2K ohm ±10% 1/4W | 1    |
| R194                 | RD8 2 2251 KV000 | Carbon 8.2K ohm ±10% 1/4W | 1    |

| Key No.              | Part No.         | Description                     | Q'ty |
|----------------------|------------------|---------------------------------|------|
| SUB CIRCUIT PCB ASSY |                  |                                 |      |
| R187                 | RD8 2 2251 KV000 | Carbon 8.2K ohm ±10% 1/4W       | 1    |
| R296                 | RD8 2 3251 KV000 | Carbon 82K ohm ±10% 1/4W        | 1    |
| R196                 | RD8 2 3251 KV000 | Carbon 82K ohm ±10% 1/4W        | 1    |
| Q113                 | 203 5 5100 53640 | Transistor 2SC 536D             | 1    |
| Q213                 | 203 5 5100 53640 | Transistor 2SC 536D             | 1    |
| Q114                 | 203 5 5100 53640 | Transistor 2SC 536D             | 1    |
| Q214                 | 203 5 5100 53640 | Transistor 2SC 536D             | 1    |
| Q115                 | 203 5 5100 53640 | Transistor 2SC 536D             | 1    |
| Q215                 | 203 5 5100 53640 | Transistor 2SC 536D             | 1    |
| Q112                 | 203 5 5100 69351 | Transistor 2SC 693E             | 1    |
| Q212                 | 203 5 5100 69351 | Transistor 2SC 693E             | 1    |
| CABINET              |                  |                                 |      |
|                      | 141 0 1119 25200 | Cabinet Assy Top                | 1    |
|                      | 141 0 1249 06400 | Lid Assy Cassette               | 1    |
|                      | 141 0 1539 00100 | Cover Assy Head                 | 1    |
|                      | 141 2 2419 13000 | Cloth Switch                    | 5    |
|                      | 141 2 4219 05300 | Screw Washer                    | 2    |
|                      | 141 2 7519 17000 | Shaft, Lid Cassette             | 1    |
|                      | 141 2 8519 39900 | Spring, Lid Cassette            | 1    |
|                      | 141 0 1119 25300 | Wooden Cabinet Assy             | 1    |
|                      | 141 2 1419 05800 | Rating Plate                    | 1    |
|                      | 141 2 1539 07100 | Panel, Jack                     | 1    |
|                      | 141 2 1749 01800 | Leg, Rubber                     | 4    |
|                      | 141 2 2419 13200 | Cover, Trans                    | 1    |
|                      | 141 6 4559 00100 | Serial No Sheet                 | 1    |
|                      | 141 6 4729 14200 | Label, Dolby Calib              | 1    |
|                      | 141 6 4749 01400 | Label, Dolby                    | 1    |
|                      | 141 0 1639 04700 | Knob ASSY, Calib R              | 1    |
|                      | 141 0 1639 04800 | Knob ASSY, Calib L              | 1    |
|                      | 141 0 1649 01000 | Knob ASSY, Volume               | 1    |
|                      | 141 2 1649 07200 | Knob Slide Switch               | 3    |
| ACCESSORY            |                  |                                 |      |
|                      | 4 2369 70360     | Plug, Adaptor                   | 1    |
|                      | 4 2369 70370     | Plug, Adaptor                   | 1    |
|                      | 4 2369 70470     | Cord, DIN to DIN                | 1    |
|                      | 4 2419 73810     | Cassette                        | 1    |
|                      | 141 6 4119 43800 | Instruction Manual              | 1    |
|                      | 141 6 4729 01900 | Label Caution                   | 1    |
| PACKAGE              |                  |                                 |      |
|                      | 141 2 3529 10600 | Stopper Cassette                | 1    |
|                      | 141 6 1419 22900 | Individual Carton               | 1    |
|                      | 141 6 1429 09100 | Box, Accessory                  | 1    |
|                      | 141 6 1449 32500 | Case, Styrofoam                 | 2    |
|                      | 141 6 2519 07014 | Poly Cover 70 x 140, Plug       | 1    |
|                      | 141 6 2519 13027 | Poly Cover 130 x 270, AC Cord   | 1    |
|                      | 141 6 2519 20025 | Poly Cover 200 x 250, Accessory | 1    |
|                      | 141 6 2519 50070 | Poly Cover 500 x 700, Unit      | 1    |
|                      | 141 6 4559 00100 | Serial No Sheet                 | 2    |
|                      | 141 6 4729 14500 | Label Accessory                 | 1    |

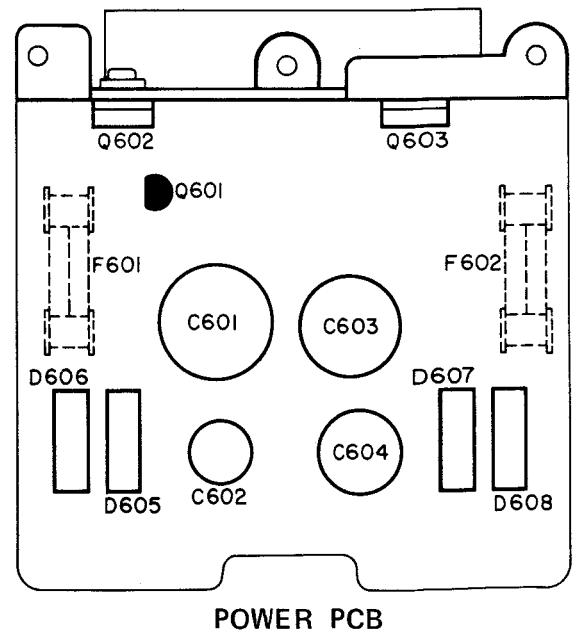
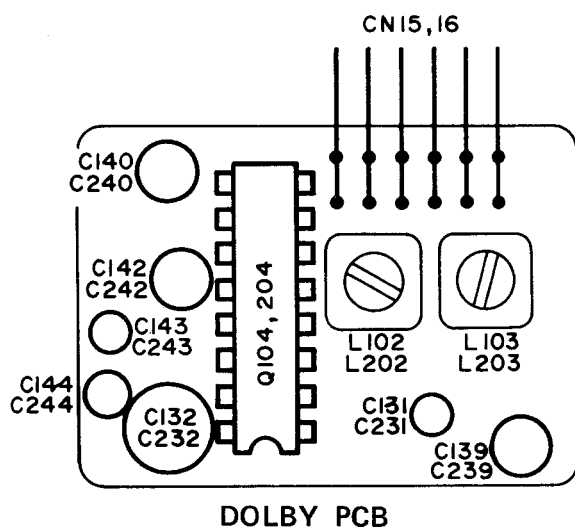
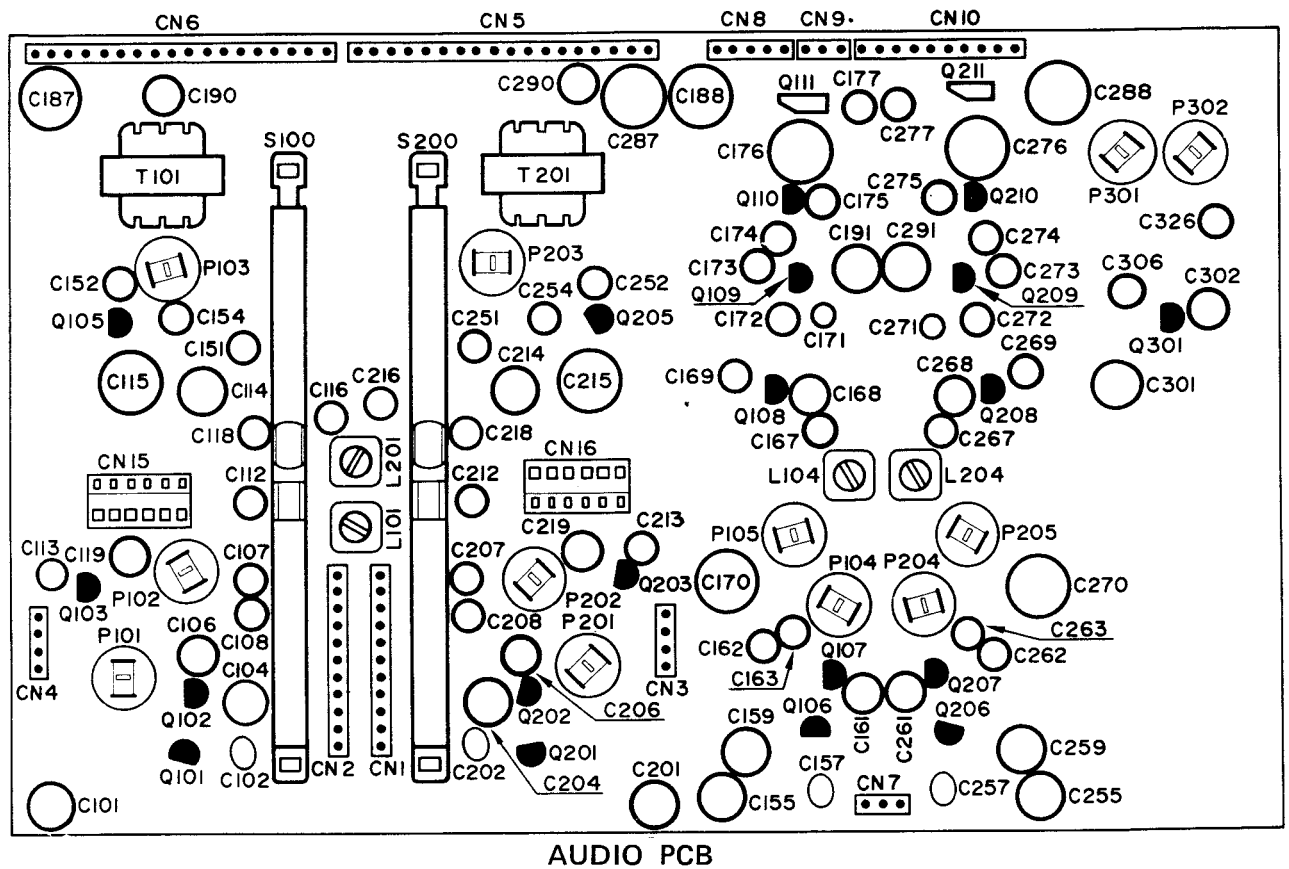
\_\_\_\_\_



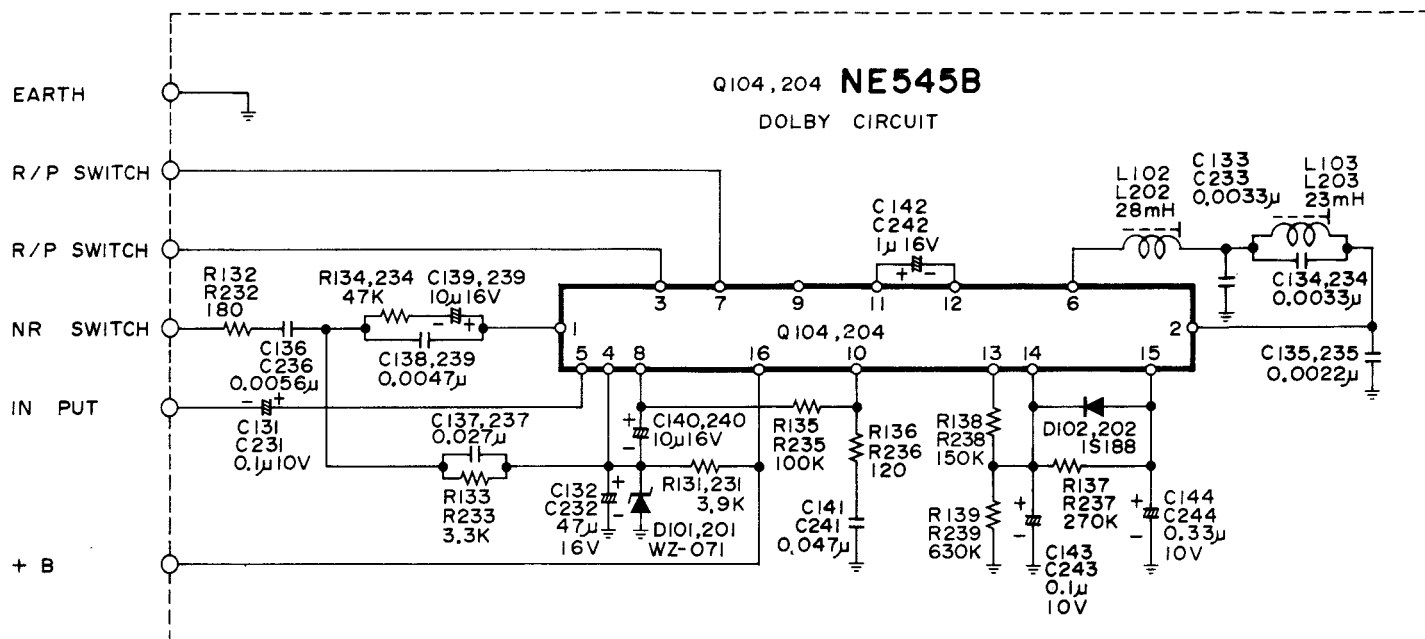
# PARTS LOCATION



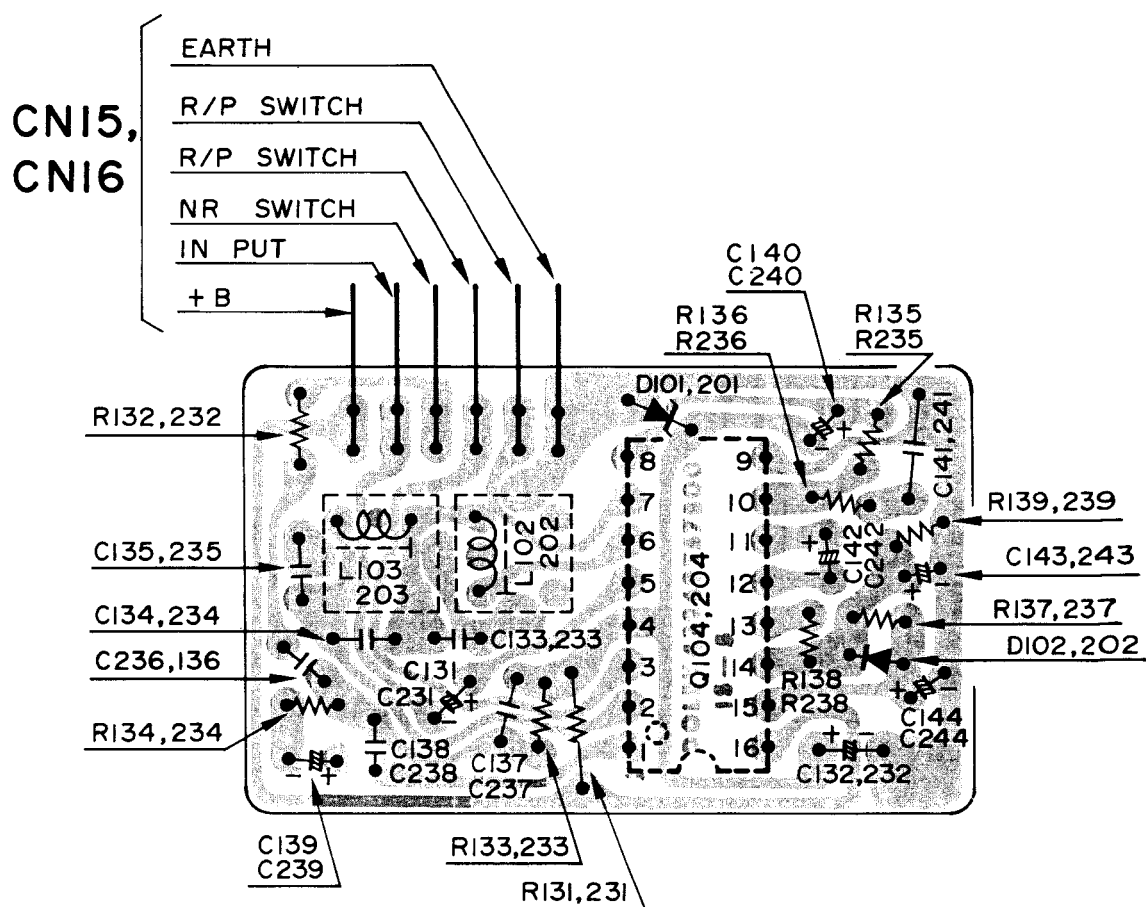
# PARTS LOCATION



**SCHEMATIC DIAGRAM (DOLBY CIRCUIT).**

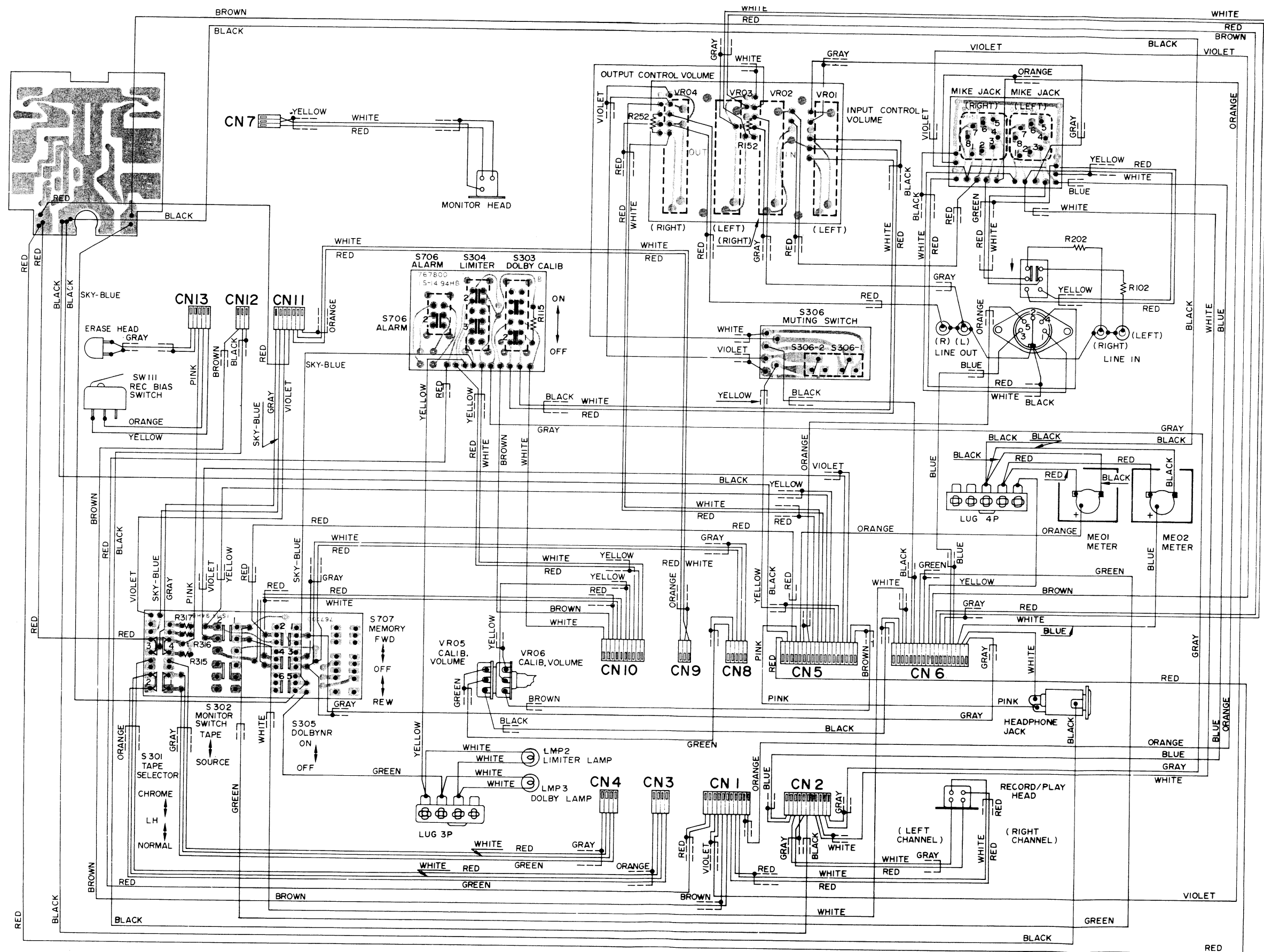


### WIRING DIAGRAM (DOLBY CIRCUIT)

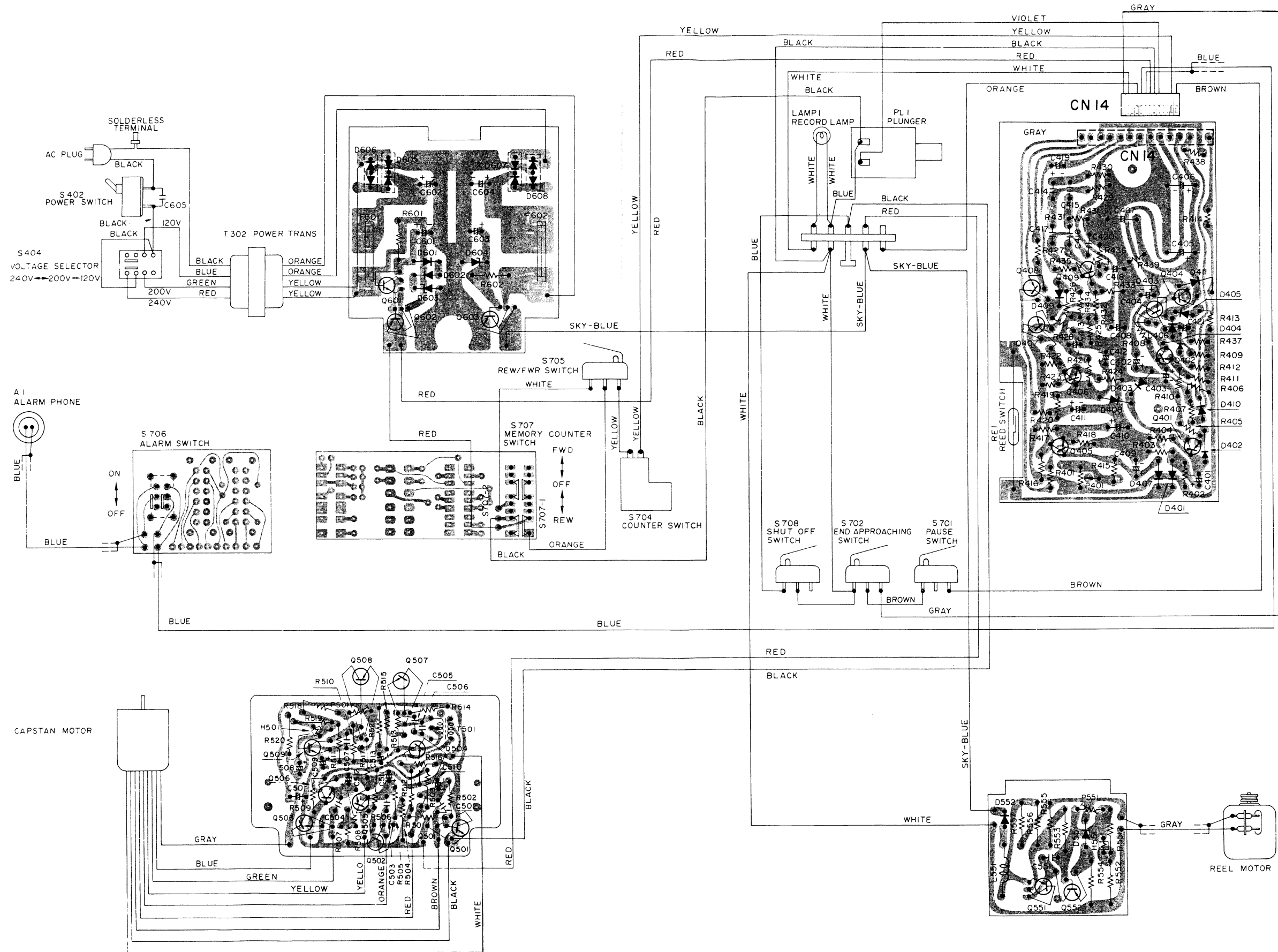


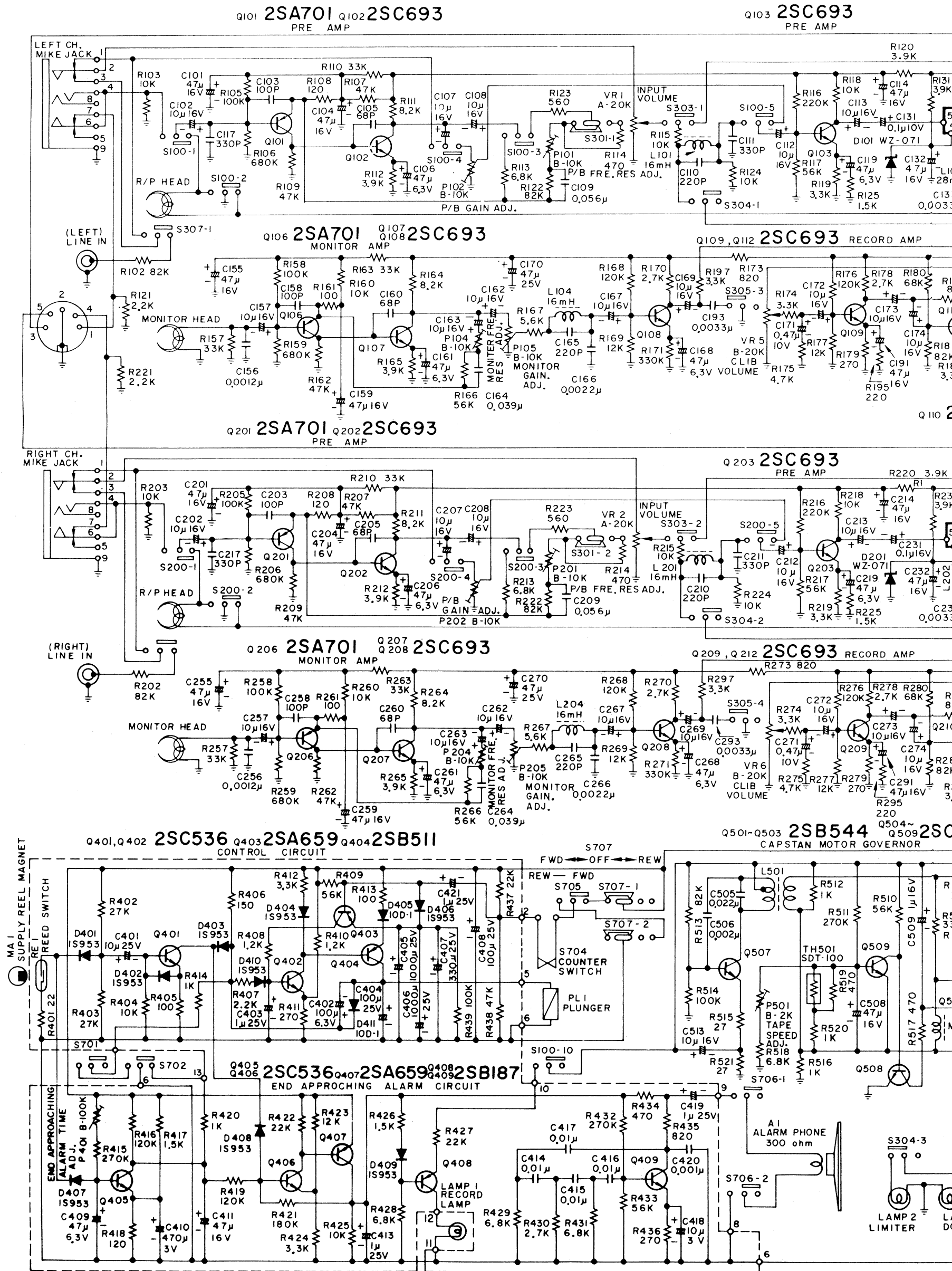


# WIRING DIAGRAM

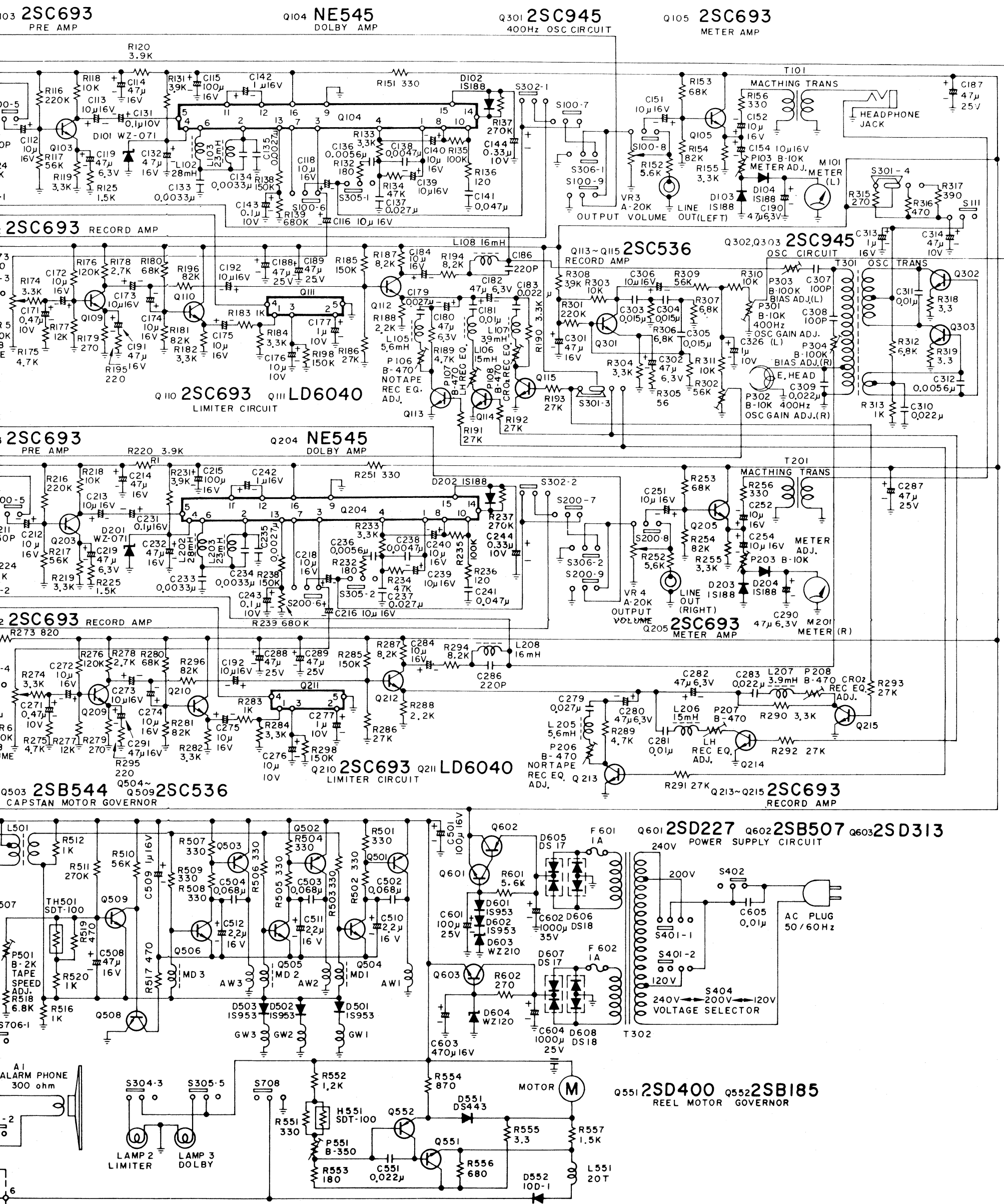


# WIRING DIAGRAM



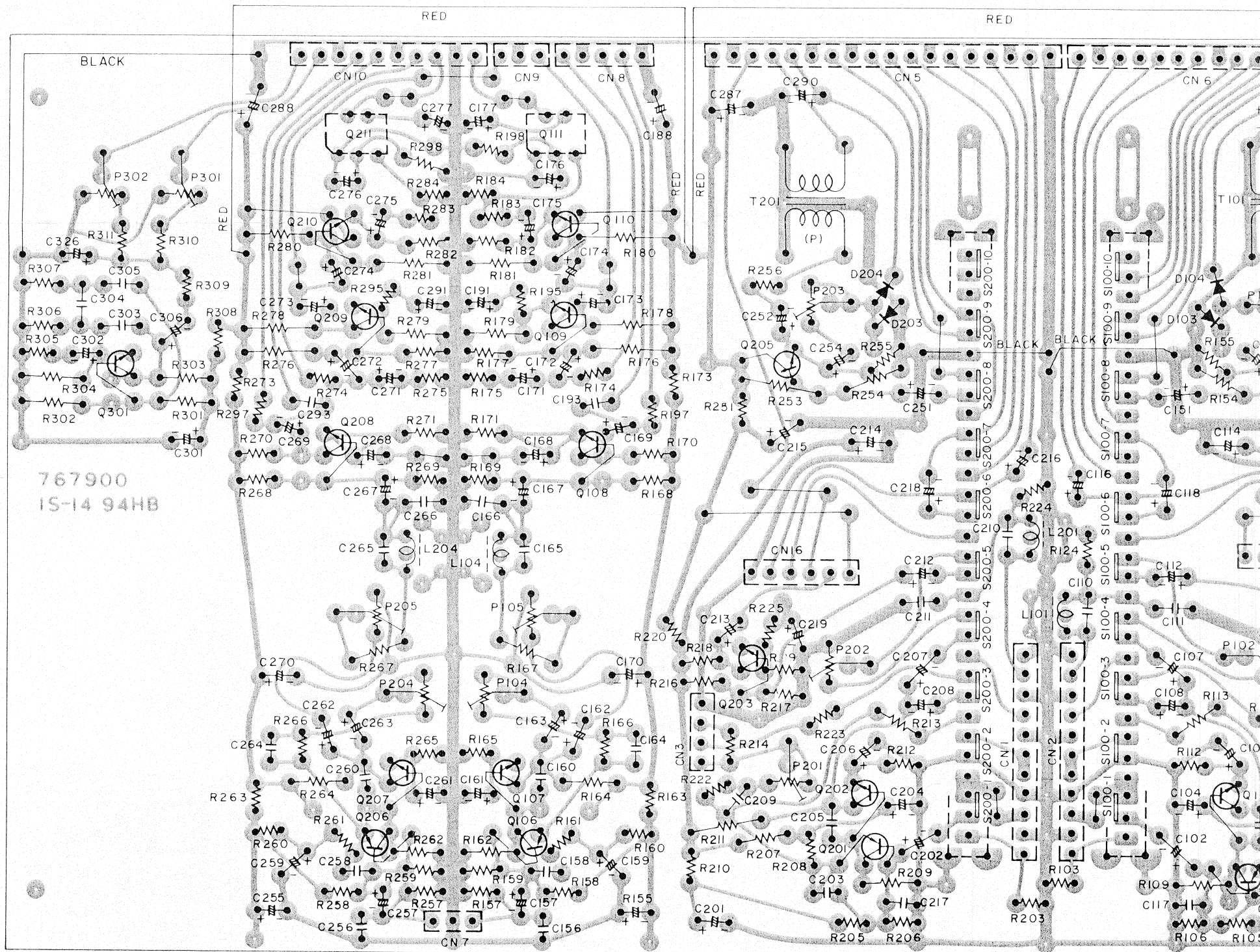


# RD 4545 SCHEMATIC DIAGRAM

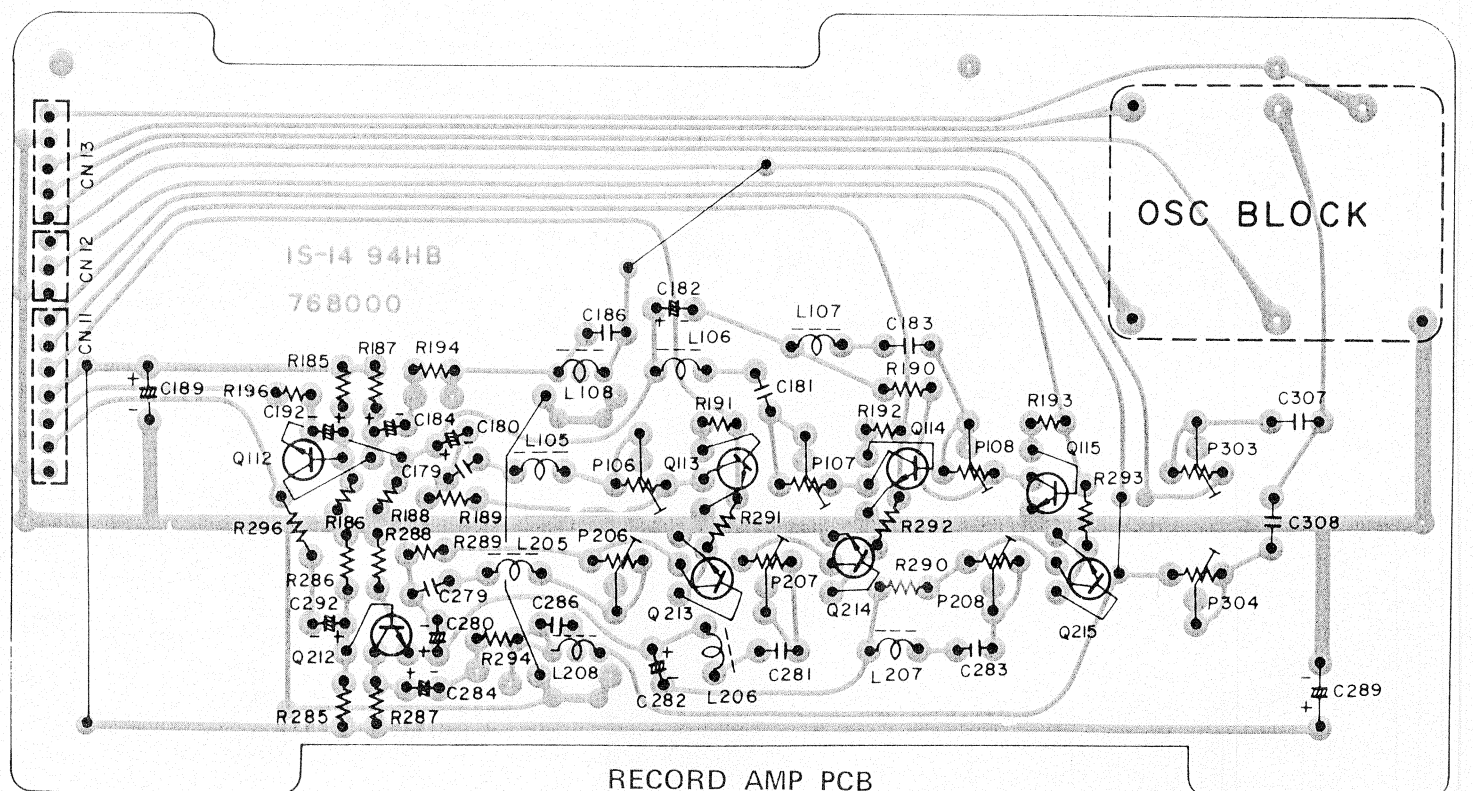




# RD 4545 WIRING DIAGRAM



AUDIO AMP PCB



RECORD AMP PCB



RECORD AMP PCB